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EVALUATIONS OF PLANNING CONCEPTIONS:
PLANNED AND ACTUAL USES IN MAYFAIR PARK, EDMONTON

by

© ALAN ANDREW MANZIE

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

OF MASTER OF ARTS

IN

GEOGRAPHY

DEPARTMENT OF GEOGRAPHY

EDMONTON, ALBERTA

SPRING, 1978

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "Evaluations of Planning Conceptions: Planned and Actual Uses in Mayfair Park, Edmonton submitted by Alan Andrew Manzie in partial fulfilment of the requirements for the degree of Master of Arts.

Supervisor

Edgar L. Jackson

Thomas L. Burton

Date August 31, 1977

This thesis is dedicated to
Andy, Pam, and especially to

Margaret,

Who sheltered me in Sydney
During the Great Depression.

ABSTRACT

In this thesis the results of an evaluation of the planning of a major urban recreation facility are presented. The subject of this evaluation was Mayfair Park, a facility designed on a scale large enough to serve the population of Edmonton, Alberta. The primary aims of the study were to identify the planning conceptions that led to the creation of the park, and second, to evaluate these conceptions in the light of the experience gained from their implementation.

The evaluative criteria used to judge the completed design were the reactions, opinions, attitudes and behaviour of people observed or interviewed within the park. Systematic observation studies and user-attitude questionnaires were utilized to uncover this information. Interviews were also held with the planners who designed the park. In this way it was possible to compare actual recreation patterns generated by the facility, with those that were planned for.

It was found that, in general terms the park was a planning success. It is well patronized in both summer and winter and those visitors interviewed indicated they valued the park highly. The planner's role in the success of the park appears to be due to their fairly accurate perception of the recreational needs of Edmonton's residents. Similarly, it was found that planners' perceptions of the use patterns in the park generally reflected those that took place there, though some divergence between planned and actual uses was evident.

For example, the park was designed to encourage "family uses". This meant that users of all ages would be attracted to the facility and that small groups of users would be encouraged. It was determined that the majority of visitors interviewed belonged to small social groups based on ties of friendship and kinship, yet the park also attracted a degree of use by large, noisy groups, particularly in summer. Some conflicts were noted between these competing user groups. Other planning conceptions that guided the creation of the park, and that were evaluated for this study were 1) the park was to encourage seasonal uses; 2) it was to be freely accessible to all residents of Edmonton; 3) it was to be a city-level park in a hierarcy of urban parks in Edmonton; and 4) the park was to be a total recreational concept, there was to be "something for everyone" in it.

The park was planned and developed during the period 1959-1973, though initial planning had been completed by 1961. The planning approach of the then Parks Department personnel has been termed the traditional approach, and was characteristic of recreation planning during the years when the park was created. Under this approach no attempt was made to collect information on the preferences of the people planned for - estimates of the demand for a park such as Mayfair were based on the assumptions, intuitions and past experiences of the personnel responsible for the park's design.

It is suggested that this approach is flawed in that planners' perceptions of public goals do not always reflect accurately the values, wants and needs of a given community. It is also suggested that, to reduce the chances of these perceptual gaps resulting in unsuccessful recreational facilities, a wide variety of information from the public should be collected and analysed by planners prior to any attempt to formulate goals and objectives. Public participation in the planning process is one method by which this information could be collected - another is by the post-plan evaluation of completed planning projects, the method used in this study.

ACKNOWLEDGMENTS

I wish particularly to acknowledge the helpful guidance of Dr. P.J.Smith, Professor of Geography, during the conception and preparation of this thesis. His advice was pertinent at all stages of the study and throughout my stay at the University of Alberta.

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Thanks are extended to the architects and planners of Edmonton Parks and Recreation who were interviewed during the course of the study. Mr. S. Maslo was especially generous with his time, while Mr. R.B.Wilson and Mr. B.Card were always approachable and keen to be of assistance. Edmonton Parks and Recreation also provided a grant to help defray typing expenses.

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CHAPTER 1

INTRODUCTION

THE PROBLEM

Recreation has been defined in several ways but a common component is the notion that recreation is expressed as activity. A well known definition is that of Meyer and Brightbill (1956): "activity voluntarily engaged in during one's leisure-time and primarily motivated by the satisfaction of pleasure derived from it." Brown et al. (1973) define recreation as a phenomenon in which people engage to fulfil certain needs; these needs, then, are expressed as recreational activities. Another common notion is that the purpose of recreation is to revitalize people: Seeley (1973, p. 1), for example, suggests that recreation is "a renewal or preparation for routine and necessary work, or a means of escape from it."

In recent years criticism has been directed at both these views of the phenomenon of recreation. The criticism varies, but it is obvious that there is increasing dissatisfaction with the results of recreation research derived from either the "recreation is activity" approach or the "re-creation" approach. Recreation is a complex behavioural concept and many diverse factors interact to create the patterns of leisure activity that are observed in any community. Burton (1976, p. 53), for example, has noted that the values, wants and needs of potential users of recreational facilities are among the more significant of these factors. According to Burton, values, wants and needs constitute latent demand, or the desire to participate in leisure pursuits of various kinds. Latent demand in Burton's scheme is transformed into opportunity through interaction with three main factors:

1. The existing supply of recreational facilities, their number, type, location and accessibility.
2. Differential awareness of these facilities on the part of potential users.
3. The personal characteristics of each potential user; for example, the amount of free time and money available to be spent on recreation.

The exercise of opportunity leads to participation in recreational activities which, in turn, ultimately influences the values, wants and needs of users (Burton, 1976, p. 53).

Such a dynamic, cyclical view of community recreation patterns means that if planners are to address adequately the task of meeting individuals' values, wants and needs, then they must incorporate a great diversity of behavioural information into their planning and research briefs. In particular, they need to know information relating to current recreational activities, and information on the recreationists' ideas, attitudes and perceptions of existing recreational opportunities and settings.

In practice, however, planners have often neglected to obtain this information. It is suggested here that there are two main reasons for this. First, planners and planning agencies have observed participation rates in outdoor recreation activities and have used these statistics as a measure of community recreational needs. This approach is flawed in several respects. It is derived from a static view of community recreation patterns whereas, as Burton (1976) has shown, participants and the nature of participation in outdoor recreation are in constant change. Moreover, the approach represents a quantitative measure of need only, and disregards important considerations of the quality of the recreation experience and measures of public satisfaction with existing opportunities and facilities (Gold, 1972).

The second reason why planners have neglected to take account of information on users' perceptions relates to planners' conceptions of the planning process. Contemporary planning thought and practice have emphasized the completion and implementation of master plans and recreation development plans. Rarely is attention paid to the way that these plans, once implemented, perform in their day-to-day operations. Similarly, new planning "theories" and concepts are often accepted without having been subjected to rigorous examination to see whether they have stood the test of time. Where the word 'evaluation' appears in the planning literature, it usually refers to the process of selecting the most favourable alternative from among several different solutions to a planning problem. It seldom relates to the process of evaluating completed planning projects, despite the likelihood that such studies may help planners learn from, rather than repeat their mistakes.

This thesis is concerned with the notion of evaluation in the planning process, and in particular with the post-plan evaluation of a completed project. Mayfair Park is the subject of this evaluation.

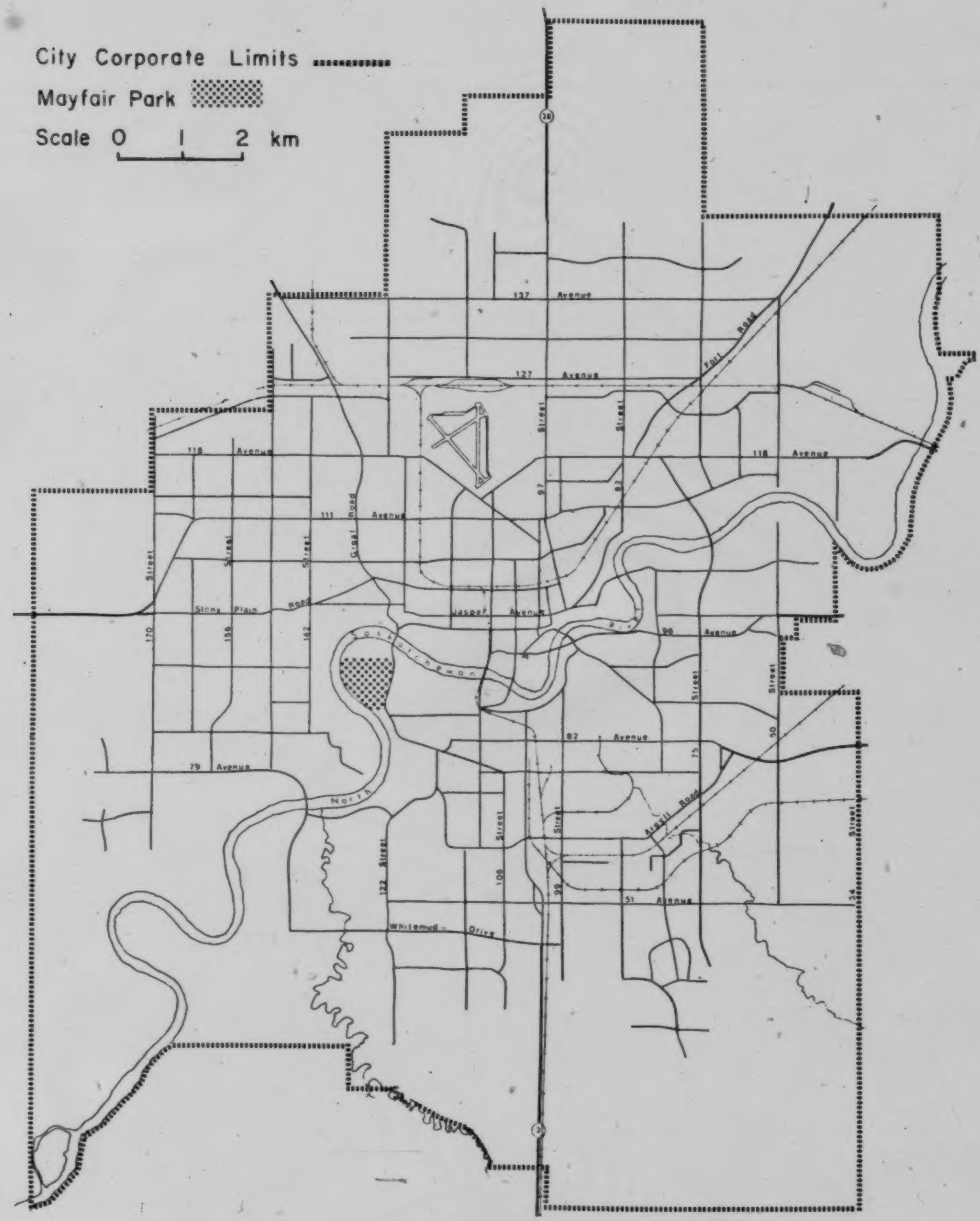
MAYFAIR PARK: LOCATION, HISTORY AND BRIEF DESCRIPTION

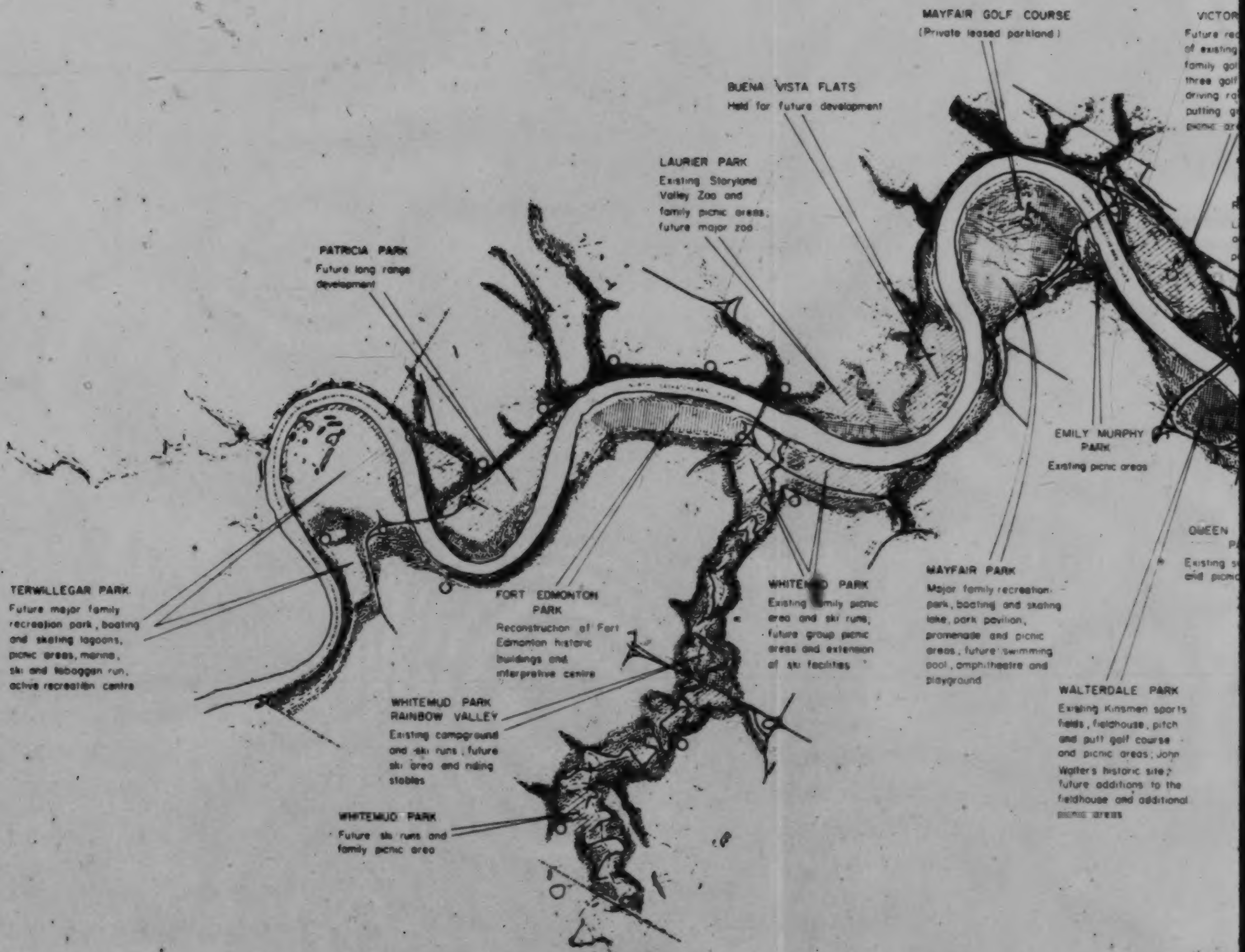
Mayfair Park is a major urban recreation facility designed on a scale large enough to serve the population of the city of Edmonton, Alberta (population 548,000, 1975). The park is situated on approximately three hundred acres of river valley land on the south bank of the North Saskatchewan River, immediately west of Groat Bridge and close to both the University of Alberta and the central business district of Edmonton (Figures 1 and 2). Preliminary planning of Mayfair Park began in 1959-60 and the grading and dumping of landfill was started in the spring of 1961. The site was originally a gravel pit so much of the early work was rehabilitative. A shallow lake was completed and filled in 1964 and social skating began during the winter of 1964-65. Additional facilities which have been added since that time include a concession and skating pavilion (finished in 1968), a children's adventure playground (completed in 1973), and two picnic shelters (Figure 3). Development of the park site is not yet complete and the City of Edmonton Parks and Recreation Master Plan 1970-1980 calls for the addition of a swimming pool, a restaurant and an outdoor theatre when money becomes available.

In 1977, the name of the park was changed to William Hawrelak Park in honour of the late Mayor of Edmonton. However, throughout this thesis the name Mayfair Park will be used, for several reasons. First, the thesis was commenced and questionnaires were administered when the park was known by its original name. Second, the area was known as 'Mayfair Flats' from before 1920 and so the use of the original name is historically correct. Third, the original name was used throughout the planning process and appears on all documents, reports,

Figure 1.

Mayfair Park : Location Of Study Area


City Corporate Limits
Mayfair Park
Scale 0 1 2 km
137 Avenue
127 Avenue
118 Avenue
111 Avenue
Groat Road
Fort Road
Stony Plain Road
Jasper Avenue
98 Avenue
82 Avenue
79 Avenue
51 Avenue
Whitemud Drive
Argyll Road
170 Street
156 Street
142 Street
122 Street
109 Street
99 Street
97 Street
82 Street
75 Street
50 Street
34 Street
North Saskatchewan River


MAYFAIR GOLF COURSE
(Private leased parkland)
VICTOR
Future rec
of existing
family gol
three golf
driving ra
putting g
picnic are
BUENA VISTA FLATS
Held for future development
LAURIER PARK
Existing Storyland Valley Zoo and family picnic areas; future major zoo
PATRICIA PARK
Future long range development
TERWILLEGAR PARK
Future major family recreation park, boating and skating lagoons, picnic areas, marina, ski and toboggan run, active recreation centre
FORT EDMONTON PARK
Reconstruction of Fort Edmonton historic buildings and interpretive centre
WHITEMUD PARK
Existing family picnic area and ski runs; future group picnic areas and extension of ski facilities
EMILY MURPHY PARK
Existing picnic areas
MAYFAIR PARK
Major family recreation park, boating and skating lake, park pavilion, promenade and picnic areas, future swimming pool, amphitheatre and playground
QUEEN
P
Existing s
and picnic
WALTERDALE PARK
Existing Kinsmen sports fields, fieldhouse, pitch and putt golf course and picnic areas; John Walter's historic site; future additions to the fieldhouse and additional picnic areas
WHITEMUD PARK
RAINBOW VALLEY
Existing campground and ski runs, future ski area and riding stables
WHITEMUD PARK
Future ski runs and family picnic area

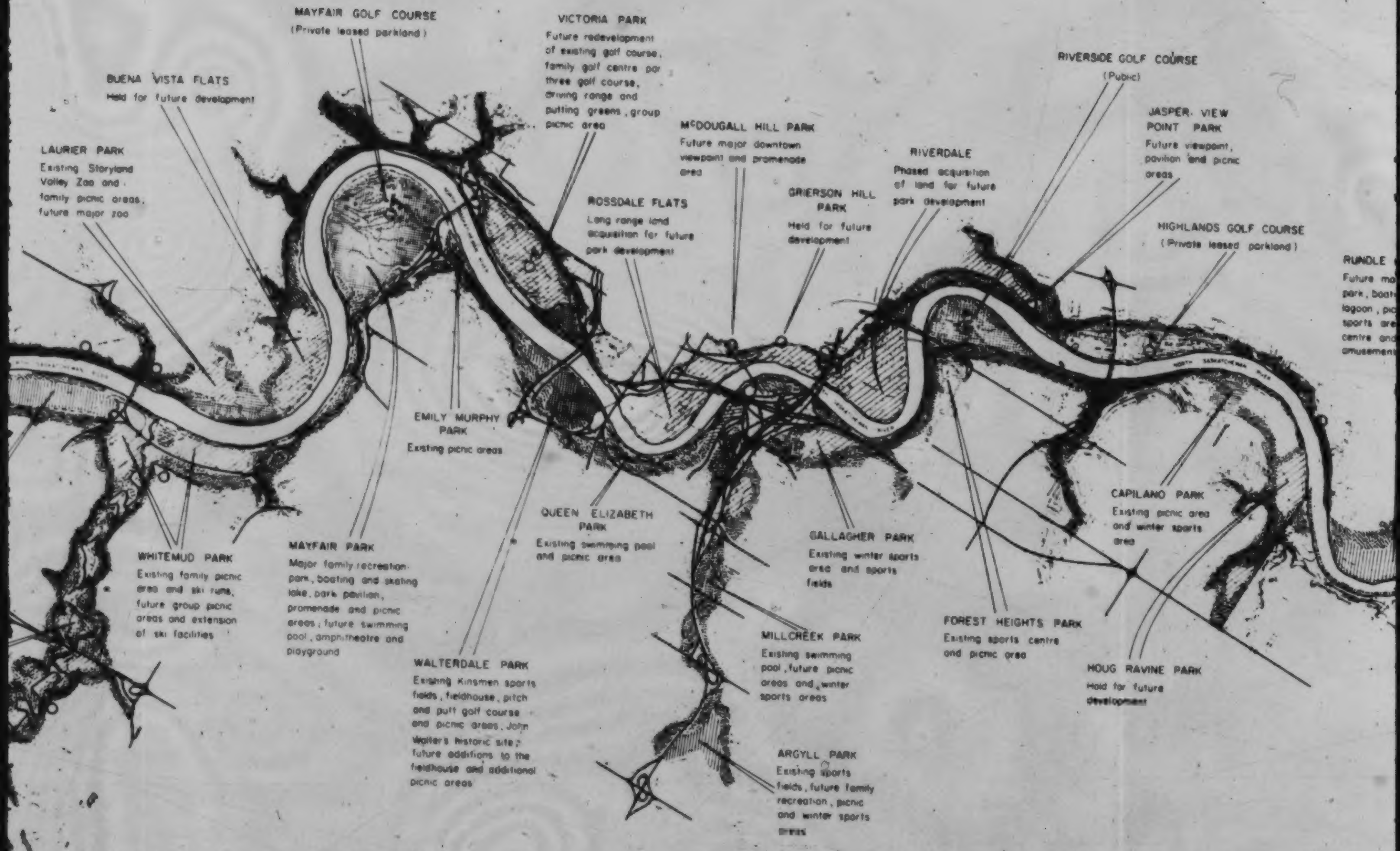
EDMONTON GENERAL PLAN

RIVER VALLEY PARKS SYSTEM

PARKS AND RECREATION

16

Poor copy


MAYFAIR GOLF COURSE
(Private leased parkland)
VICTORIA PARK
Future redevelopment of existing golf course, family golf centre par three golf course, driving range and putting greens, group picnic area
BUENA VISTA FLATS
Held for future development
LAURIER PARK
Existing Storyland Valley Zoo and family picnic areas, future major zoo
McDOUGALL HILL PARK
Future major downtown viewpoint and promenade area
ROSSDALE FLATS
Long range land acquisition for future park development
GRIERSON HILL PARK
Held for future development
RIVERDALE
Phased acquisition of land for future park development
RIVERSIDE GOLF COURSE
(Pubic)
JASPER VIEW POINT PARK
Future viewpoint, pavilion and picnic areas
HIGHLANDS GOLF COURSE
(Private leased parkland)
RUNDLE
Future mo
park, boat
lagoon, pic
sports are
centre and
amusement
NORTH SASKATCHEWAN RIVER
EMILY MURPHY PARK
Existing picnic areas
QUEEN ELIZABETH PARK
Existing swimming pool and picnic area
WHITEMUD PARK
Existing family picnic area and ski runs, future group picnic areas and extension of ski facilities
MAYFAIR PARK
Major family recreation park, boating and skating lake, park pavilion, promenade and picnic areas; future swimming pool, amphitheatre and playground
WALTERDALE PARK
Existing Kinsmen sports fields, fieldhouse, pitch and putt golf course and picnic areas, John Walter's historic site; future additions to the fieldhouse and additional picnic areas
GALLAGHER PARK
Existing winter sports area and sports fields
CAPILANO PARK
Existing picnic area and winter sports area
MILLCREEK PARK
Existing swimming pool, future picnic areas and winter sports areas
FOREST HEIGHTS PARK
Existing sports centre and picnic area
HOUG RAVINE PARK
Hold for future development
ARGYLL PARK
Existing sports fields, future family recreation, picnic and winter sports areas

28

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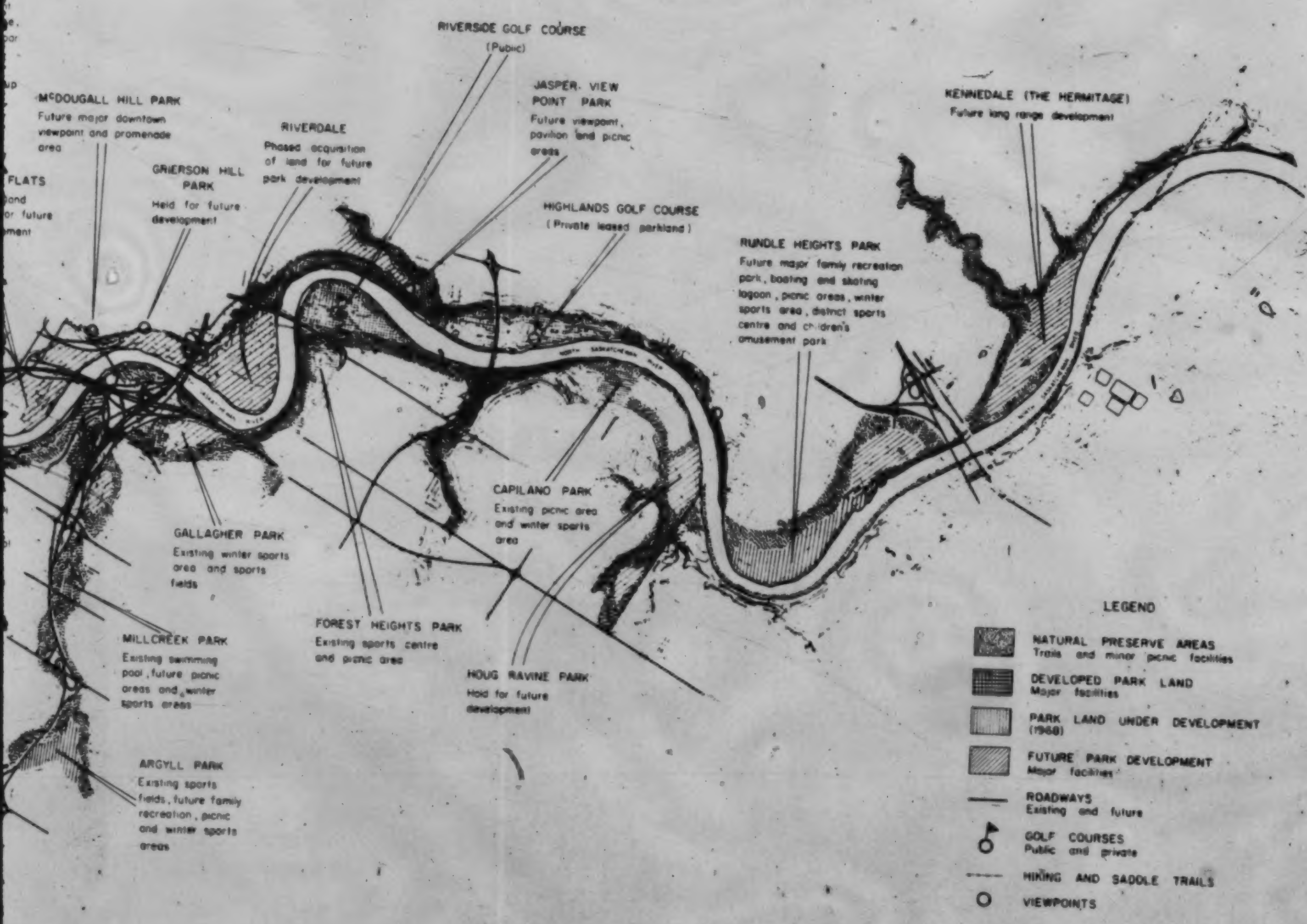
RIVERSIDE GOLF COURSE
(Public)
JASPER VIEW POINT PARK
Future viewpoint, pavilion and picnic areas
McDOUGALL HILL PARK
Future major downtown viewpoint and promenade area
RIVERDALE
Phased acquisition of land for future park development
GRIERSON HILL PARK
Held for future development
FLATS
HIGHLANDS GOLF COURSE
(Private leased parkland)
KENNEDALE (THE HERMITAGE)
Future long range development
RUNDLE HEIGHTS PARK
Future major family recreation park, boating and skating lagoon, picnic areas, winter sports area, district sports centre and children's amusement park
NORTH SASKATCHEWAN RIVER
CAPILANO PARK
Existing picnic area and winter sports area
GALLAGHER PARK
Existing winter sports area and sports fields
FOREST HEIGHTS PARK
Existing sports centre and picnic area
MILLCREEK PARK
Existing swimming pool, future picnic areas and winter sports areas
HOUG RAVINE PARK
Hold for future development
ARGYLL PARK
Existing sports fields, future family recreation, picnic and winter sports areas
LEGEND
NATURAL PRESERVE AREAS
Trails and minor picnic facilities
DEVELOPED PARK LAND
Major facilities
PARK LAND UNDER DEVELOPMENT (1968)
FUTURE PARK DEVELOPMENT
Major facilities
ROADWAYS
Existing and future
GOLF COURSES
Public and private
HIKING AND SADDLE TRAILS
VIEWPOINTS

3/3

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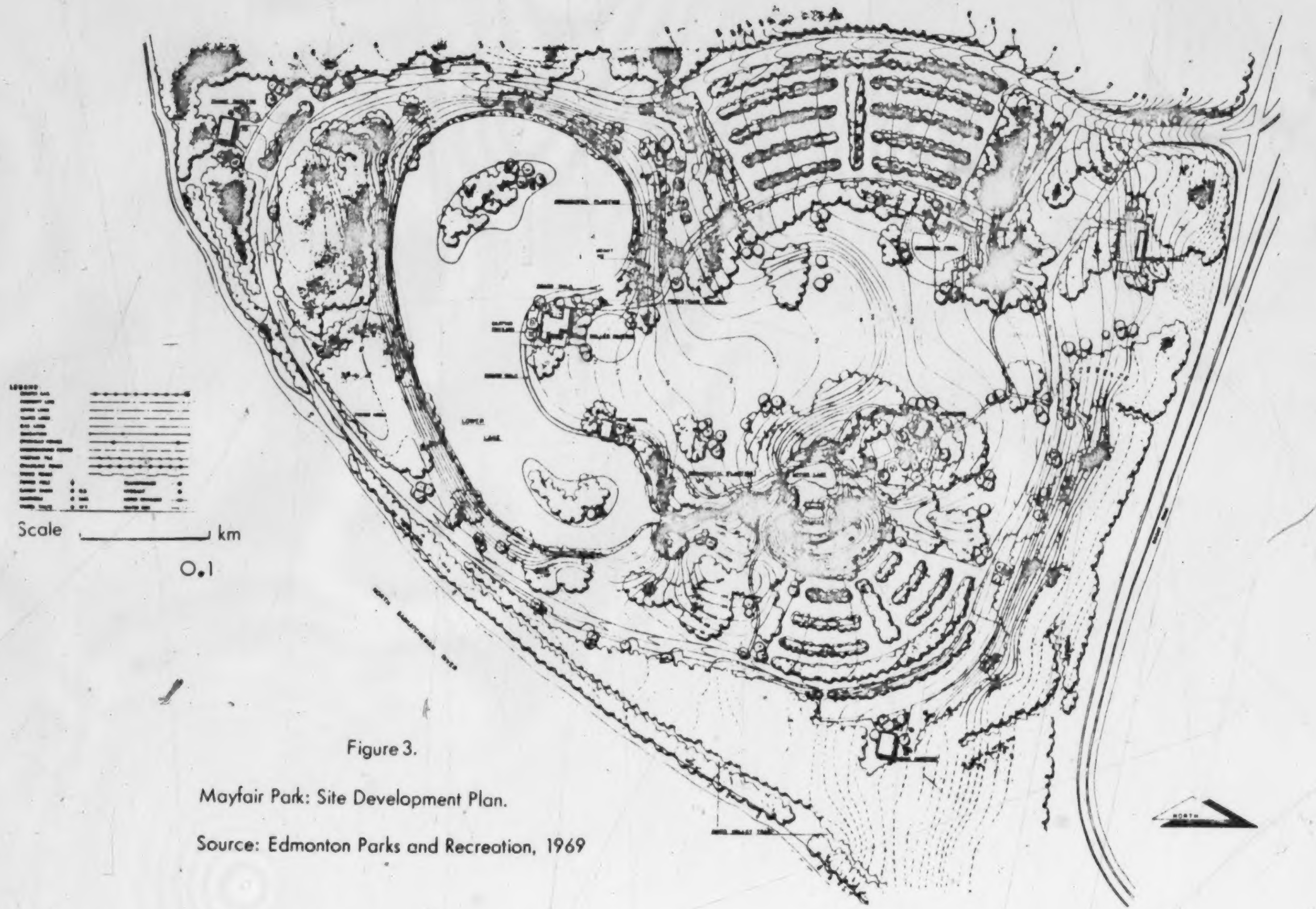

Scale
km
0.1
LOWER LAKE
NORTH SASKATCHEWAN RIVER
NORTH

Figure 3.

Mayfair Park: Site Development Plan.

Source: Edmonton Parks and Recreation, 1969

City correspondence files and council Minutes consulted during the course of research for this thesis.

Mayfair Park is part of an integrated, hierarchical system of urban recreational facilities that exists in Edmonton. The Edmonton Parks Master Plan 1970-1980 distinguishes between land requirements for park spaces at the neighbourhood level, at the district level, at the city level and at the regional level. Land needs at each of these levels vary according to prescribed standards. The standard invoked in Edmonton is a modification of the National Recreation and Parks Association recommendation of ten acres per thousand population (N.R.P.A. 1962). Table 1 illustrates this hierarchical system of parkland standards as they have been applied in Edmonton.

TABLE 1

A SCHEDULE OF MINIMUM RECREATIONAL FACILITIES

FACILITY	SIZE	POPULATION SERVED
1. Totlot	25,000 sq. ft.	2 for every 3000-4000 neighbourhood group
2. Neighbourhood Park	5 acres	1 for every 3000-4000
3. Community Park	15 acres landscaped	1 for every 15,000
4. District Park	50-70 acres (20 acres to active sports)	1 for every 40,000, eg. Borden Park 50 acres.
5. City Park	100-300 acres	more than 50,000, eg. Mayfair Park
6. Regional Park	no fixed standards	not specified

Source: City of Edmonton, Parks and Recreation Master Plan 1970-1980, (adapted from).

In this hierarchical arrangement of urban parks Mayfair is designated a city park, designed for active and passive use by all city residents and providing the opportunity for a wide variety of activities in a "large landscaped open space of unique character and emphasis" (City of Edmonton, Parks Master Plan, p. 30).

Further insight into the planning rationale for Mayfair Park can be gained from the Province of Alberta Brief to the United Nations conference in Vancouver entitled Alberta Habitat Demonstration Projects (1976, pp. 43-44). In this document it is stated that the park was designed to be a family-type recreation area providing large open spaces where people can "get away from it all" but still come in contact with other people. A basic objective was to design the park as a "passive recreation area" where organized activities and programs would not be necessary. Other characteristics of the park that are mentioned in the Brief are the following:

1. It is a park where people can have the feeling of being away from the hustle and bustle of the city.
2. The park provides the opportunity to take part in general outdoor activities such as walking, skating, fishing, nature appreciation and picnicking.
3. It is a place to sit and relax on the river bank and enjoy the scenery.

The Brief further identifies family use as the basic concept behind the initial planning of the park. At the early stages of plan formulation many aspects of family use were considered by planners, park maintenance personnel, and recreation program personnel: the resulting facilities were designed and built to encourage this concept. For example, the skating pavilion and the picnic shelters have been deliberately placed in order to create meeting or gathering places. These buildings are centralizing activity nodes. The buildings in the park are constructed from a combination of concrete and natural materials such as stone and wood. Bittorf-Wensley, the architects, describe them as "elementary and rugged" in style.

THE STUDY OBJECTIVES

It has been noted that some urban recreational facilities may be underutilized even when the demand for recreational land in urban areas is great (Gold, 1972). To avoid such discrepancies the recreation planning process should incorporate systematic surveys of user preferences and satisfactions, in order to measure the quality of the recreational experience, as well as the quantity. If not, the end result may be a facility that "reflects a quantitative statement of an idealized system as envisioned by the supplier, not the user" (Gold, 1972, p. 370).

Mayfair Park was conceived as a response to demand projections carried out in the early 1960s. The philosophies and attitudes of the planners of that period created a design that mirrored their ideas of what was desirable. A major aim of this thesis is to determine the park planners' perceptions of the community needs that they were attempting to satisfy. In this way, any perceptual gaps between the planners who designed the facility, and the recreating public's expectations and actual behaviour within the park can be identified. An initial assumption on this aspect of the study was that the general public's "felt" needs (Mercer, 1973) did not correspond to the recreation planners' beliefs about those needs. From this it is postulated that the recreation patterns that are observed within the park will not correspond to those that were planned for.

The answer to the compound question of what do planners know about the recreational needs and attitudes of city residents, and how they acquire this information requires an understanding of the recreation planning process. Therefore, of secondary importance to the study, but essential to a determination of any perceptual gaps between planners and the public planned for, is a critical review of the process of planning for recreation. This is because the planners' beliefs about the nature and purpose of the planning process have been primarily reflected in design structures on the ground. In addition, the recreation planners' conceptions of the public's recreational needs have been in part responsible for the use patterns generated by the completed facility.

The literature review of currently held notions of the planning process will concentrate on several stages of planning activity or tasks. Particularly relevant is the stage leading to the identification and determination of goals and objectives, and also the stage involving the collection and analysis of data relating to the capacity of the area's resources to support various kinds of recreational activities. Both these stages require analysis of the characteristics of the area, including user's needs, desires and observed behaviour. The third area of the planning process relevant to this thesis is the activity of evaluation in its broadest sense. This includes the re-evaluation or reviewing of existing facilities, a procedure here termed post-plan evaluation.

It is felt that information gained from re-evaluation studies provides planners with a measure of individual satisfaction with existing facilities and recreational opportunities. Such studies can also determine if completed facilities are used in the way they were planned to be used. They provide, first, a measure of satisfaction with the design of a facility and second, a measure of the capacity of the recreation planning process to create urban recreational settings that adequately cater to community recreational needs.

Post-plan evaluations have been greatly neglected in the planning literature and few case studies can be found. This is understandable and stems from two major constraining factors. The first factor concerns the budgetary limitations of city government which demands that plans be implemented not evaluated. Secondly, planners themselves often conceive of the planning process as a linear sequential process, terminating in the creation of a rigid, if not inviolable master plan (Burton, 1976).

In contrast to this 'traditional' view of the planning process (Gold, 1973; Burton, 1976) is an outlook increasingly being adopted by those who recognize that planning is a dynamic process. These planners argue that in a pluralistic society, the satisfaction of recreational needs can only be achieved by a planning mechanism that is evolutionary and adaptive in character (Burton, 1976). Such a view might be termed a "systems view" of planning (Chadwick, 1971).

Both these divergent views of the planning process are reviewed in an attempt to answer the following questions:

1. In the planning of Mayfair Park, was the approach relied upon by the City of Edmonton Parks and Recreation Department the traditional approach?
2. How were the recreational goals and needs of the people of Edmonton determined and planned for?

3. Does the creation of Mayfair Park reflect an era when recreation planners were guided by an elitist philosophy of planning, an era when the design concept was not adequately linked to a clear conception of projected use patterns?

The answers to these questions may allow some judgment to be made on the efficacy of parks planning in Edmonton as conceived and practised by the planners of the early to mid 1960s.

THE STUDY DESIGN

A variety of techniques was selected to advance the objectives of the present study. Systematic observations were undertaken to identify and record the activity patterns of users of Mayfair Park. The observations were carried out in both summer and winter as Mayfair is a park designed for seasonal uses. Driving censuses determined the density and disposition of people at various times of the sample days while recordings of age, sex and the activities of park visitors were made during walking censuses. The park was divided into sectors for this purpose, most of them visible from the park access road.

This information uncovered patterns of use but did not determine why people chose a particular park location. Nor did the observations determine people's opinions about the park. For this information, selective interviewing of individual users was undertaken. The perceptions, expectations and attitudes of recreationists within the park were measured by these interview surveys. In this way, also, respondents' verbal accounts of their activities could be checked against observations of their overt behaviour. The two research techniques outlined so far - observation and questionnaire research were viewed as complementary; information from one source added to information from the other.

To determine the recreation planners' perceptions of the community recreational needs they were attempting to satisfy with the creation of Mayfair Park, two additional research methods were used. The first was interviews with civic officials past and present, with planners responsible for the design of the park, and with consultants engaged by the city. Documentary sources were also consulted. It was believed that an examination of City Council records was necessary to determine the attitudes of the City Parks and Recreation Department, as well as the attitudes of the recreation planners, to the provision of urban recreational facilities. The _Minutes_ of Edmonton City Council and the City's correspondence files provided this information. Dale (1969) used a similar documentary search and interview approach in his study of the role of successive City Councils in the evolution of Edmonton.

A review of the planning literature was conducted to outline the role of post-plan evaluations within the planning process. This review concentrates on differing conceptions of the planning process, and in particular on the role of evaluative studies within this process.

Limitations

Non-users of Mayfair Park were not interviewed. Although such information would be useful, it was decided that the study would focus on existing perceptual gaps between planners of recreational places and users of those planned recreational settings, rather than determining why some people do not use a particular facility, and what outdoor spaces they do use. This latter topic is an important area for further research.

CONTENT OF THE THESIS

This thesis has been organized into five parts. Chapter II, the first section, is a review of relevant literature on the planning process and on evaluation as it has been practised within that process. Essentially, the review attempts to identify a role for re-evaluative studies in planning for urban recreation. It concludes by showing the types of behavioural information that planners need to collect and analyse in post-plan evaluative studies.

The second section is a discussion of the planning and design history of Mayfair Park compiled from the documentary record and from the interviews with the park's planners. This information is presented in Chapter III. Chapter IV, the third part of the thesis, contains the results of the park user questionnaires, for summer and winter visitors. It is devoted to a discussion of visitors' opinions, perceptions and attitudes towards Mayfair Park.

Chapter V, which contains the discussion of the observation studies conducted within the park, is the fourth section of the thesis. It deals with the use patterns observed within Mayfair Park. The last section is contained in Chapter VI. In this chapter the conclusions of the research are presented, together with suggestions for further studies.

CHAPTER II

PLANNING, THE PLANNING PROCESS AND POST-PLAN EVALUATION

INTRODUCTION

The primary purpose of this chapter is to identify a role for post-plan evaluation in the urban recreation planning process. A secondary aim is to show, by means of a literature review, the types of information required for the successful planning of urban recreational facilities. It is argued that the evaluation of completed projects, in the light of their day-to-day performance, provides valuable information for the planning of future areas. It is obvious from the literature consulted that this information has, in the past, been overlooked or its relevance missed, by many planners and planning agencies. Therefore, this chapter begins with a discussion of the nature of planning and the planning process in some detail, reviews the meaning and the role of evaluation in the planning process, and concludes with a discussion of post-plan evaluation in urban recreation planning.

THE NATURE OF PLANNING

Definitions

In the language of most dictionaries, a plan is a course of action directed towards the attainment of certain ends. Planning is an activity by which a particular system is analysed at a point in time to determine the direction of the forces for change; and, as

Burton (1976, p. 53) has pointed out:

> The basic raison d'être for planning is that it prevents the undesirable effects of change while promoting the desirable ones. It is, in effect, the process whereby man deliberately sets out to influence and control his environment so as to improve the quality of his life.

There is also a planning process which is distinguished in the literature from the activity of planning in that it is the means by which this technical information is collected and assimilated. Throughout this thesis, this semantic distinction is regarded as unimportant; planning is both a process and an action. In Chadwick's words:

> The answer to the question: what is planning?, is simply this, then: that planning is a process, a process of human thought and action based upon that thought - in point of fact, forethought, thought for the future - nothing more or less than this is planning, which is a very general human activity.
>
> (1971, p. 24)

This thesis is concerned with planning process theory, and with planning of a particular sort - urban recreation planning. Urban planning deals fundamentally with the arrangement of spatial patterns over time (Chadwick, 1971, p. 24). Planning for outdoor recreation in urban areas is viewed as an application of the planning process to a contemporary problem - that of providing well designed, properly located recreational facilities that are responsive to the needs of the urban population. Such planning deals with systems of great complexity. Because of this, planning theorists have derived models of the planning process based on general systems theory, on cybernetic models, and on stochastic structures. Before these models of the planning process are examined an immediate task remains; to discuss the nature of urban planning.

Characteristics of Planning

Most planning texts emphasize the following characteristics of urban planning.

1. It is transdisciplinary in character. As Chapin has remarked:

> Urban planners work in a three-dimensional world and, along with a concern for the city as an economic entity and a social system, possess a direct and absorbing interest in the physical make-up of the city and its visual form - not only how the city functions but also how the city affects man's senses and thereby slips into his consciousness, and how, in turn, this affects his living experiences or, more basically, his values and his behavior.
>
> (1963, pp. 218-219)

That is, in essence, planning deals with the functional aspects of the city and with various perceptual aspects of city life also. Many disciplines are involved in the study of urban phenomena but planning is also concerned with the interrelatedness of these phenomena.

2. Planning is innovative; it aims at inducing change (Friedmann, 1966). Planning promotes orderly growth through the use of 'rational procedures of thought and action' (Faludi, 1973a, p. 35). In this sense, it is a characteristically human activity: "planning is done by human beings for human beings"(Chadwick, 1971, p. 25).

3. Planning is future-oriented; it is motivated by images of a desired outcome, in other words, it is goal-directed. This is stated succinctly by Chadwick: 'Planning is future-oriented, and thus optimistic, for it assumes man's ability to control his own destiny, at least within certain limits' (1971, p. 25).

4. Planning is a field in which the sciences and the arts coalesce. It is a combination of the creative, the intuitive, and the analytical - the former being represented in the design phase of a planning operation and the latter in the background studies that provide a rationale for the design (see Chapin, 1963, pp. 221-223).

5. Planning is an activity concerned with making the best use of human abilities and it is often equated with rational choice (Banfield, 1959; Davidoff and Reiner, 1962; Dakin, 1963; Driver, 1970). Phrases such as 'reducing waste', 'optimum allocation', 'efficient utilization of resources', are prominent in planning briefs. Davidoff and Reiner (1962) note that the term 'rationality' has been used by planners in two very different senses. It sometimes means increasing the reasonableness of decisions and it can also mean postulating full knowledge of the system in question. Both uses are common in the planning literature, though since the work of Simon (1956) on the concept of 'satisficing' behaviour, the former sense of the term is the more prevalent.

6. The adoption of a systems approach and the advocacy of ecological principles, to both the process of planning (see Catanese and Steiss, 1968; McLoughlin, 1969; Stuart, 1970; Chadwick, 1971) and to the study of urban areas which comprise the subject of planning activity, have gained such prominence in recent years that they characterize the approach of many planning agencies. Indeed, it has been argued that an ecological approach has been a feature of planning in practice for the last fifty years (Smith, 1975, pp. 269-270). The underlying theme of McLoughlin's book Urban and Regional Planning - A Systems Approach (1969) is that the understanding of human

relationships is aided by the adoption of an ecological or systems point of view. McLoughlin demonstrates first, that complex systems such as those with which planners deal require sophisticated control mechanisms and second, that these control devices should be isomorphic with the system to be controlled. In other words 'the planning process must have a similar 'shape' to the human ecosystem which it seeks to control' (McLoughlin, 1969, p. 95). Chadwick, after a discussion of the Law of Requisite Variety, advances a similar proposition:

> the mechanism for controlling the systems with which planning deals must be capable of generating requisite variety to match those real world systems at the level of variety which is appropriate to secure an adequate level of performance.
>
> (1971, p. 72)

The fundamental point made by both McLoughlin and Chadwick is that planning, like ecological systems, needs to be a continuing or cyclical process in order to create and adapt to change.

To sum up, therefore, planning is essentially:

1. Transdisciplinary - the problems with which planners deal often require the contributions of several disciplines.
2. Innovative - the purpose of planning is to induce or control change.
3. Future-oriented - planning seeks to select the means best suited to achieve predetermined goals.
4. Identified with the sciences and the arts - it is a combination of the creative, the intuitive and of the analytical.
5. Equated with rational choice - planning is aimed at

enhancing the rationality of decision making.

6. A sophisticated, cyclical process/activity of considerable variety.

Having sketched some important points about the nature of planning, the purpose of the following section is to describe the planning process, paying particular attention to the role of evaluation within this process.

THE PLANNING PROCESS

Definitions

A number of definitions of the planning process can be found in the planning literature. Some of these are:

> The planning process has as its objective the accomplishment of premeditated goals and is primarily concerned with providing technical information for decision making and for plan implementation and control (Driver, 1970, p. 199).

> ... People and practitioners view planning as a continuous and incremental process composed of a series of evolutionary and rationally organized steps which develop guidelines for urban growth, development or renewal (Gold, 1973, p. 128).

> For our purposes, a planning process may be defined as a course of activity that is intended to heighten understanding of the nature of problems requiring examination, of the alternative possible solutions that exist, and of the relative merits of these alternatives (Lichfield et al., 1975, p. 18).

Chapin notes that the term 'planning process' is used in both a behavioural and a technical sense. He suggests:

> The technical usage generally relates to stages of planning in some defined work program of the planning agency. Thus, we see reference to the establishment of a work program which proceeds

> from a specification of what is needed to how a study is to be done and in what order the work is to be executed.
>
> (1963, p. 223)

And, that:

> The behavioural usage of process in planning literature ... has to do with a sequence of action which begins with establishing certain goals, involves certain decisions as to alternative ways of achieving these goals and eventually takes the form of steps for carrying out decisions, followed by evaluation and perhaps a new sequence of action.
>
> (1963, p. 224)

It is in this latter sense that the term is used in this thesis. Essentially, the sequence described above by Chapin falls into these stages:

> Goal formulation and specification stage
>
> Decision making stage
>
> Plan execution (implementation), evaluation, reorientation stage
>
> (1963, p. 224)

Most models of the planning process that are described in the planning literature offer somewhat more expansive schemes. Some of these models will now be considered.

Progressive Planning Approach

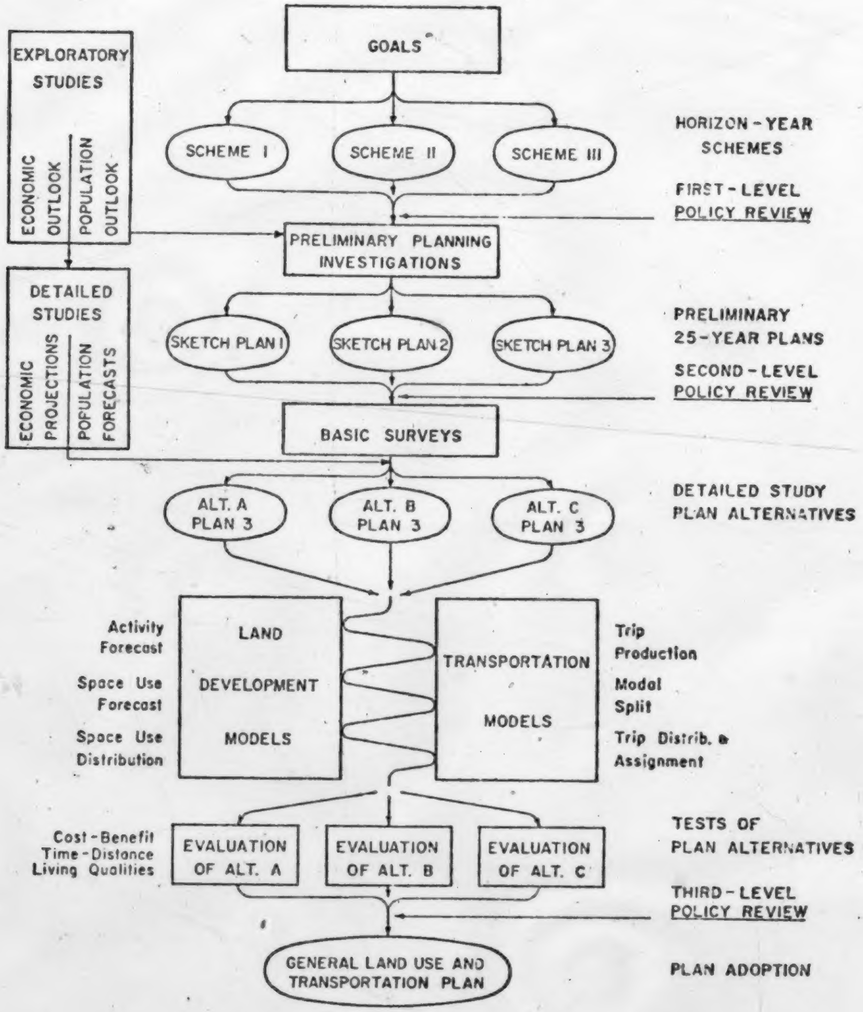
Chapin (1965, p. 458) envisages a planning process with well defined stages, a sequential yet iterative process where the stages occur in cycles. In moving from the formulation of goals to the plan preparation and implementation stages, Chapin's model describes a process of evolution from broad conceptualizations to final, detailed blueprints for development. The general land use and transportation plan is the end product of this process. Figure 4 indicates the general sequence of these cycles of planning activity.

As Figure 4 shows, the process of planning begins with the formulation of goals and with the specification of policy emphases for an agreed-upon horizon year. Cycles of planning activity are then set in motion with the initial cycles leading to solutions of a more or less general nature. In subsequent planning cycles these solutions are reviewed and subjected to more exacting forms of analysis until, finally, decisions of a detailed nature are made. Hence, Chapin's conceptualization is termed the 'progressive planning approach' as policies and plans are progressively refined until a suitable plan has evolved. The essential feature of the progressive approach is the existence of a hierarchy of policy levels as indicated in the right-hand column of Figure 4. Policies at each level are shown feeding into the planning process, and the solutions from the planning process return to influence policy decisions (see Chapin, 1965, pp. 350-351).

Design plays an important role in Chapin's process of plan preparation. It initially involves the preparation of alternative sketch plans for each basic policy emphasis under study. Once prepared, these sketch plans may point out potential conflicts in the proposed locations of differing land uses. This process will continue until a final series of alternative plans is generated and locational conflicts are brought into harmony. Chapin therefore envisages a close relationship between the creative design and policy formulation phases of the planning process. The final result is the "best practical,

Figure 4.

The Progressive Planning Approach


EXPLORATORY STUDIES
ECONOMIC OUTLOOK
POPULATION OUTLOOK
DETAILED STUDIES
ECONOMIC PROJECTIONS
POPULATION FORECASTS
GOALS
SCHEME I
SCHEME II
SCHEME III
HORIZON-YEAR SCHEMES
FIRST-LEVEL POLICY REVIEW
PRELIMINARY PLANNING INVESTIGATIONS
SKETCH PLAN 1
SKETCH PLAN 2
SKETCH PLAN 3
PRELIMINARY 25-YEAR PLANS
SECOND-LEVEL POLICY REVIEW
BASIC SURVEYS
ALT. A PLAN 3
ALT. B PLAN 3
ALT. C PLAN 3
DETAILED STUDY PLAN ALTERNATIVES
Activity Forecast
Space Use Forecast
Space Use Distribution
LAND DEVELOPMENT MODELS
TRANSPORTATION MODELS
Trip Production
Modal Split
Trip Distrib. & Assignment
Cost-Benefit
Time-Distance
Living Qualities
EVALUATION OF ALT. A
EVALUATION OF ALT. B
EVALUATION OF ALT. C
TESTS OF PLAN ALTERNATIVES
THIRD-LEVEL POLICY REVIEW
GENERAL LAND USE AND TRANSPORTATION PLAN
PLAN ADOPTION

Source: Chapin, 1965, p. 458

most economical, and most attractive design for all uses, fitted to the topography and the existing land use pattern and articulated with the circulation system" (Chapin, 1965, p. 369).

This much is clear from Chapin's diagram. Less clear is his assertion that the whole planning sequence is a cyclical one, and that with the adoption of the general land use plan a new sequence of planning is set in motion. Thus, Chapin does not argue for the creation of an inflexible and unalterable blueprint; rather, the document is to be continually adjusted according to changing circumstances.

In terms of planners' perspectives of the planning process, Chapin represents what may be termed a 'middle road.' Prior to 1965, most planning theorists stressed the importance of the product (general plan) of the planning process (see, for example, Kent, 1963). More recent theorists emphasize the importance of the process of planning (Harris, 1974; Lichfield et al., 1975, p. 17). To develop this point, two very different approaches to planning will be considered.

Divergent Views of the Planning Process

In recent years there has been considerable debate over the procedural aspects of the planning process. Rather than detail the extent of this debate, it is sufficient for the aims of this thesis to note the existence of two opposing approaches to planning which may be characterized as traditional | static | blueprint planning, and innovative | dynamic | process planning. The first view is associated with the pre-1965 era and the second has developed since that time and has been carried on into the 1970's.

Traditional | static | blueprint planning proceeds in the following manner:

1. Define goals
↓
2. Identify objectives and elaborate criteria for choosing among alternatives
↓
3. Collect and analyse data
↓
4. Plan formulation - included identification of alternatives and the choice of preferred alternatives.
↓
5. Plan implementation

(from Burton, 1976, p. 56)

This approach emphasizes "the production of glossy plans and the unswerving execution of the proposals they contain" (Faludi, 1973a, p. 131): hence, it is 'blueprint planning.' It is a 'static' approach in that each stage is seen as separate and distinct from the next, following in a predetermined order. The end product of this process is the master plan, which is usually an inflexible statement of agency policy (Burton, 1976, p. 55). The distinguishing characteristic of the traditional approach is its relative inflexibility.

On the other hand, the innovative | dynamic | process mode of planning stresses the continuing nature of the planning exercise. Faludi explains:

> In process planning, the plan document itself, where this program is laid down (which is of central importance in blueprint planning - hence its name) - becomes far less significant, perhaps even ephemeral, a daily computer printout. Process planning becomes an approach in which strategic information and feedback impinge directly on action providing signals that lead to incremental adjustments to its direction

and intensity.

(1973a, p. 132)

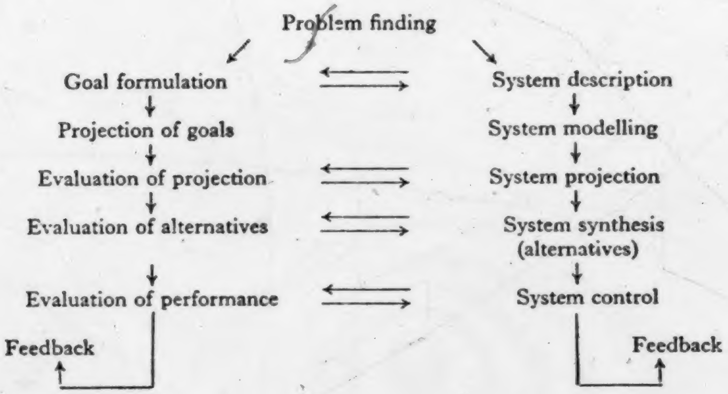
Under this approach, the process, not the product of planning is emphasized. Programs can be adapted even during their implementation as new information is received which indicates a change is warranted.

This second, newer view of planning also emphasizes the interrelationships among the various stages of planning activity. Agencies that adopt this planning perspective recognize that each activity or level of analysis in the process will directly affect the other activities as they are undertaken. In Burton's (1976, p. 58) words, "the whole process is one of constant evolution and change." The language of systems analysis is characteristic of process planning, and the new approach relies, not upon the technical standards, the master plan and the land-use regulation of the blueprint approach (Faludi, 1973a, p. 133), but upon the development of sophisticated models, gaming simulation and related mathematical techniques (Gold, 1973, p. 129).

Chadwick's (1971) 'rational model of systematic planning' illustrates the innovative | dynamic | process mode of planning. It is here presented as Figure 5. The essential point to grasp from Chadwick's conceptual system is that planning stages as such have been dispensed with as they merge into one another. They are, instead, "states through which the system passes more than once" (1971, p. 68). In addition, Chadwick's model shows that the recognition and description of the planning system, as well as the formulation of criteria suitable for its testing, proceed simultaneously. It is also a 'dynamic' model in the sense that it can accommodate change in the system of planning

Figure 5.

A Rational Model of Systematic Planning
Derived from Scientific Method


Problem finding
Goal formulation
Projection of goals
Evaluation of projection
Evaluation of alternatives
Evaluation of performance
Feedback
System description
System modelling
System projection
System synthesis
(alternatives)
System control
Feedback

Source: Chadwick, 1971, p. 68

concern and can deal with large, varied and complex systems such as planning deals with in the real world. In McLoughlin's (1969) terms, the model is isomorphic with the system to be controlled - that is, it is firmly based on a systems view.

Chadwick's model of the planning process does not end with the implementation of a comprehensive land-use plan; instead, like the systems it seeks to control, it is constantly evolving. The model stresses evaluation and, if necessary, the modification of decisions taken at any stage of the planning operation. Plan implementation within Chadwick's cybernetic framework is a process of continuous replanning rather than one of plan execution (see Haynes, 1974).

The Lichfield-Kettle-Whitbread Model: A Normative Model of a General Planning Process

This model is included here for two reasons. First, it is a comprehensive model, resulting from the examination of nearly one hundred descriptive and normative studies of planning procedures appearing in the planning literature of the last decade. It is a summary or 'state of the art' model describing contemporary planning practice. Second, it provides a framework for the discussion of evaluation in the planning process which follows.

In the Lichfield (1975) model, eleven major planning activities are outlined in a linear and sequential form (Figure 6). Each identifiable stage contains a number of steps which describe all the activities the authors feel should characterize the process of planning from the time a problem is perceived to the time when a course of action is decided upon, implemented and reviewed. Like both Chapin and Chadwick, Lichfield et al. recognize the need for continual review of decisions taken at various stages in a planning operation. They explain:

> Our linear model is not inconsistent with a cyclic approach to plan-making. Recycling may take place at numerous stages within it. We also recognize that there will always be room for differences in opinion over the appropriate sequence of some of the stages. It is also likely that many planning activities will in practice be undertaken simultaneously. It is convenient, nevertheless, to compartmentalize different kinds of activities, and place them in some approximate order of execution.
>
> (1975, p. 22)

And further, that:

> we recognize that in practice it will often be desirable to recycle and process at various

Figure 6.

A Model Of A General Planning Process

1. PRELIMINARY RECOGNITION AND DEFINITION OF PROBLEMS
    - Surveillance and analysis of 'problems'
    - Comparison of existing and forecast conditions
    - Assessment of problem significance
2. DECISION TO ACT AND DEFINITION OF THE PLANNING TASK
    - Investigate problems and alternative courses of action
    - Define the purpose of the planning task
    - Formulate goals
    - Formulation of approach to the study and to the design and evaluation of alternative plans
3. DATA COLLECTION, ANALYSIS AND FORECASTING
    - Collection and analysis of data relevant to the planning problems
    - Forecasting the scope for change in urban developments
    - Determination of evaluation data requirements
4. DETERMINATION OF CONSTRAINTS AND OBJECTIVES
    - Determine constraints
    - Determine objectives for the plan
5. FORMULATION OF OPERATIONAL CRITERIA FOR DESIGN
    - Formulation of measures for the objectives
    - Collect evidence on the relative importance of objective achievements
6. PLAN DESIGN
    - Select design methods
    - Prepare alternative plans
7. TESTING OF ALTERNATIVE PLANS
    - Test for internal consistency
    - Assess feasibility with respect to constraints
8. PLAN EVALUATION
    - Measure levels of achievement of objectives
    - Appraise the evidence produced
    - Set down findings in a logical framework
    - Make recommendations to decision- takers
9. DECISION-TAKING
    - Collaboration and debate among decision-takers
    - Collective choice of the preferred plan
10. PLAN IMPLEMENTATION
    - Establish machinery for implementation
    - Initiation of planned developments
11. REVIEW OF PLANNED DEVELOPMENTS THROUGH TIME
    - Observation of consequences of the adopted plan
    - Comparison with predicted outcomes, and appraisal of the significance of any unanticipated consequences
    - Identification of any new problems arising

Source: Lichfield et al. 1975, pp. 20-21

> stages, perhaps several times, in the light of what has been learned. For example, ... recycling of plan design may be undertaken either to define alternatives in greater detail or in an attempt to produce superior alternatives.
>
> (1975, p. 21)

Planning activity begins in the Lichfield model with the recognition of the existence of 'problems' in the urban environment, problems that stem from various unsatisfied wants of the community. In stage 2 a decision to act is made and general goals are formulated. In this stage the planning task is defined. In stage 3 the study of relevant past, present, and future physical and socio-economic factors is commenced. This stage, if done thoroughly, helps crystallize the planning problems in such a way that objectives can be formulated at the next stage of planning activity, stage 4. Objectives relate directly to problems within the study area, and are more specific statements than the goals developed at stage 2. Lichfield et al. envisage that work on evaluation can begin at stage 3 in order to influence the kinds of data collected.

Stages 4 and 5 describe what Lichfield et al. call "preliminary" planning activities, namely, the determination of constraints and objectives, and the formulation of operational criteria for design. Stage 5 is concerned with transforming objectives into some operational form, useful for design. Taken together, stages 4 and 5 lead to a design brief. The designers, at stage 6 of the process, use the objectives to generate a range of alternatives that promote the interests of different groups in the community. In stage 7 these alternative plans are tested for internal inconsistencies and for feasibility. Feasibility is assessed in the legal, administrative, financial and technological senses.

Plan evaluation begins in stage 8 of the Lichfield et al. model. It is assumed that the planners responsible for the generation of alternatives have been thorough, and have included as many alternatives as the limitations of time, money, and other considerations permit. Evaluations may be informal, intuitive assessments of the various designs, or may be more formal procedures aided by techniques such as Lichfield's (1969) "planning balance sheet", or Hill's (1966) "goals-achievement matrix." The discussion of plan evaluation and related techniques is passed over here. It is the subject of the next section of this chapter.

In stages 9 and 10 of the Lichfield et al. model the preferred alternative is chosen from amongst those generated, and a programme for the implementation of the resultant recommendations and proposals is developed. The cycle of planning activities is not completed with implementation. Stage 11 is the review stage where the observation of completed projects is undertaken and this information is fed back into the planning process, perhaps at stage 3, or perhaps earlier. With this stage the cycle of planning activity begins afresh as information gained in the light of time and experience is drawn upon for future planning projects.

It is evident from the Lichfield model, and from the Chadwick (1971) model that 'evaluation' in the planning process has come to have several meanings. It can refer to the evaluation of alternative designs during plan preparation, or it can mean the evaluation of the environmental and behavioural consequences of projects conducted after their implementation. It is also evident that differing conceptions of the planning process envisage differing roles for both forms of evaluation. The review of planned environments through time is an activity neglected by the traditional | static | blueprint approach. It is more consistent with process modes of planning. The following section is devoted to an examination of the role of evaluation in the former sense, that is, as an aid to plan preparation in the planning process. Then the discussion turns to a consideration of the evaluation of completed projects.

EVALUATION IN THE PLANNING PROCESS

Evaluation Defined

Despite the longstanding debate in the planning literature over the procedural aspects of the planning process, the notion of evaluation as an explicit, formal, planning activity has only recently emerged. Perhaps the main reason for this is that some sort of evaluative activity has been intuitively built into the planning process over the years. Designers, in particular, often review successful completed projects and incorporate these ideas into their plans for future projects. However, such an approach is an informal one, and is very much dependent on the whims of the individual planner/designer. Here, evaluation is considered a more formal planning activity. It is defined as:

> the process of analysing a number of plans or projects with a view to searching out their comparative advantages and disadvantages and the act of setting down the findings of such analyses in a logical framework. The essence of evaluation is the assessment of the comparative merits of different courses of action.
>
> (Lichfield et al., 1975, p. 4)

Evaluation used in the sense defined above refers to the procedure of examining the pros and cons of alternative plans or courses of action, and making a judgment on them. Lichfield et al. (1975) distinguish this process of evaluation from testing and valuation. Testing is a procedure undertaken prior to plan evaluation and applied to ensure that a plan under preparation conforms to agency standards and principles (such as set-back regulations, height regulations, zoning by-laws and open space standards). Valuation refers to a single stage in the total process of plan evaluation; that of estimating "the relative importance of items of difference in advantage or disadvantage between plans" (Lichfield et al., 1975, p. 5). Evaluation as envisaged by Lichfield et al. is a far broader concept than this. It includes all aspects of the process of comparing plans: 1) the framework devised for the analysis, 2) the principles of assessment, 3) the measures and techniques employed in the comparison, and 4) the collection of evidence (1975, p. 5). This is an important point for it implies that evaluation procedures can aid in the development of alternatives as well as in the choice among them. Perraton (1974) uses the term in a similar sense.

The Role of Evaluative Studies in the Planning Process

In most conceptions of the planning process evaluation is utilized to aid in the selection of the 'best' plan from a number of possible alternative schemes. Until very recently these alternative designs were intuitively derived, and the evaluations were subjective. Evaluation was principally a part of the design process in planning and was informally carried out at the stage where final blueprint documents were produced. In the last decade this approach has changed somewhat, though the chief role of evaluative studies has remained that of an aid to plan preparation.

As an example of the use of evaluation in the design phase of a planning operation, the study Central Lancashire: Study for a City (1967) is well worth describing in some detail. The study was commissioned by the British Ministry of Housing and Local Government, and the consultants were instructed to evaluate alternative sites for the establishment of a New Town of 650,000 people in the vicinity of Preston, Lancashire. The published report shows a strong concentration on the design phase of the planning process. A total of ten possible sites was considered, and sketch plans were prepared for each. Evaluations of each site were conducted, based on the criteria set down during the goal-formation stage of the planning operation. Among these criteria, the following were the most important: 1) that new and existing development be thoroughly integrated, 2) that a building program capable of rapid completion could be implemented on the chosen site, 3) that transportation networks should be based on a number of private and public modes, and 4) that the land use proposals be flexible enough to enable adjustment in the case of changing circumstances.

By this method of design evaluation, four preferred alternative sites were chosen from nearly twenty possible sites. The next stage in the planning process as conducted by the Ministry's consultants was to return to the original terms of reference and initiate a second level of evaluative studies asking such questions as: "Is growth of this projected magnitude feasible in this region?" and "What is the desired balance between the number of residents and the number of facilities provided?" Based on these evaluations, the final stage in the consultant's brief is a justification for the choice of the designated planning area.

In the Lancashire study, evaluation was relevant at the plan preparation and design stage of planning. Chapin has recommended the use of evaluative studies in a similar manner and has formulated several design criteria for this purpose (1965, pp. 469-470). In the progressive planning approach, plan evaluation takes the form of an evaluation of the relative merits of alternative land-use schemes on at least three bases: cost-benefit, time-distance, and living quality. With reference to Figure 4, such evaluation occurs prior to "third-level policy review" and ultimate selection of the preferred scheme. Initially, evaluations are not expressed in absolute dollar costs; instead, costs and benefits are measured relatively in a generally subjective review of the pros and cons of each scheme. Chapin envisages detailed budgeting at a later stage in the planning process. However, these considerations of costs are balanced by evaluations of accessibility or convenience, and of livability or amenity. Accessibility in various schemes is evaluated in terms of time-distance models, while considerations of livability are more difficult to measure objectively as so many factors interact to influence the living quality of urban areas. Chapin suggests that the livability of alternative schemes could perhaps be measured by checking them against the results of surveys taken to identify public preferences (1965, p. 470).

While Chapin envisages that evaluation would be employed at the first and second levels (for example, to exercise choice amongst alternatives) plan evaluation in the progressive approach mainly operates to finalize design considerations. Despite the guidelines he has suggested, Chapin's position implies that the final evaluation of alternative schemes will necessarily be subjective and open to the judgments of planners, administrators and other decision makers. In contrast to this view, many contemporary planning theorists consider evaluation a more formal planning activity, and one which is relevant to more than just the design phase of a planning operation. It is relevant here to consider some of the characteristics of recent planning thought and action to outline the implications of these views.

First, many planners accept the view that planning is (or should be) a goal-directed process (see Meyerson and Banfield, 1955; Chadwick, 1971). This view demands that the relationship between ends (goals) and means (strategies) is thoroughly examined and clearly expressed. In particular, proponents of this view argue that the values and the rationales upon which planning recommendations are based should be made explicit. This view also demands that the criteria for evaluation must relate directly to the goals and objectives as stated (Perraton, 1974). Evaluations in the Lancashire Study were conducted in this way.

It is accepted by many that planning should be a comprehensive process (Meyerson, 1956; Chapin, 1965). Essentially, this view implies that interactions with all of the systems relevant to the planning task at hand will be identified by the planning team and thoroughly examined. Comprehensiveness means that planners must be wide-ranging in their efforts to consider alternative ways of achieving goals and in tracing the impacts of differing plans and policies.

Consequently, evaluation in comprehensive planning is a similarly wide-ranging procedure that attempts to consider all members of the public likely to be affected by the impact of various planning proposals. Lichfield et al. (1975, p. 8) distinguish this procedure of comprehensive evaluation from partial evaluation which is concerned with a smaller subset of the public identified by the members of a planning team. The former type of evaluation is considered by Lichfield et al. (1975) to be preferable.

This relates to an approach to planning that has been gaining prominence in recent years - that planning involves inherent conflicts and the need for political choice (Davidoff, 1965; Simmie, 1974; Piven, 1975). The writers just cited are representative of a group who argue that conflicts arise between different interest groups in society, mainly because differing segments of the public have different needs, values and aspirations, as well as different degrees of access to and command over society's resources. Perraton explains the implications of these views for practising planners:

> The implementation of any policy will affect differentially particular individuals or sections of the population: some will benefit, some will lose ... No longer can the planner regard himself as a neutral arbitrator between competing uses of land, in the interest of the community as a whole. No longer can he assume that the right solution to the problem will emerge simply from the survey and analysis of the area: the right solution is a matter of judgment and choice. Evaluation is the procedure to aid in that choice.
>
> (1974, p. 119)

Thus, according to Perraton, evaluative procedures must be based upon the recognition of conflict in urban areas, and they must be undertaken to make transparent the societal implications of differing courses of action, rather than conceal them. This is a view of the role of evaluative studies in the planning process with which Boyce et al. (1969) and Lichfield et al. (1975) agree.

Finally, there is another view of planning that has influenced attitudes towards the role of evaluative studies in the planning process. It has already been mentioned in the discussion of innovative | dynamic | process modes of planning - it is the belief that planning is a cyclical and continuing process. We have seen how the proponents of process planning have argued that, since planning takes place in an environment of uncertainty, the planning process should be capable of adapting to change. This means that evaluation is not confined to the plan-preparation or design stage of a planning task, but is extended in scope to include the continuous monitoring of change, the utilization of review studies to assess the effects of plans, and the feeding back of this information into the planning process, where, ultimately, goals and objectives may be redefined in the light of this new information. In other words, a cyclical view of planning implies a role for post-plan evaluation studies. These are studies of the consequences of planning decisions, and are essentially measures of the performance of planning proposals *after* they have been implemented.

In summary, it has been argued so far that evaluative studies perform several functions in the planning process. They have been used primarily as an aid to decision-making by providing information about the effects of planning proposals on all members of the public. For example, in the progressive planning approach (Chapin, 1965) evaluation operates chiefly to finalize considerations of design at the plan-preparation stage. In the more recent cyclical or 'process' modes of planning, evaluative studies are considered relevant before, during, and after plan preparation and subsequent implementation.

For the most part, evaluative studies have been informally conducted. However, with the growing recognition that planning is essentially a political activity, there has developed among planners and planning agencies a movement to base their evaluations on more formal comparisons of alternative proposals, if only to attest to the 'rationality' and 'objectivity' of the choices made. These formal comparisons have taken the form of cost-benefit analyses (Lichfield, 1960; 1964), plan-evaluation matrices (Mackie and King, 1974), the goals-achievement matrix (GAM) devised by Hill (1966; 1968), planning balance sheet analysis (PBSA) developed by Lichfield (1969; 1970; Lichfield et al., 1975), and simpler procedures such as check-lists of evaluative criteria (Cresswell, 1975).

All of these techniques have been formulated primarily to enhance the rationality of decision making in the planning process. Most are intended for application at the stage where alternative designs are under consideration, though some techniques (for example, the goals-achievement matrix) relate directly to other planning activities. There is relatively little discussion in the planning literature of the theoretical and practical value of evaluations conducted on completed projects. The following section is devoted to an examination of the role of post-plan evaluation in the planning process.

POST-PLAN EVALUATION IN THE PLANNING PROCESS

Meaning of Post-Plan Evaluation

The term 'post-plan analysis' was first introduced into the Canadian planning literature by John Dakin in his article 'Thoughts on Theory-Method in the Planning Process,' (Dakin, 1960). He expanded the term in 1963 and referred to 'post-operation data collection and analysis' (Dakin, 1963, p. 26). However, each term described essentially the same procedure: a 'survey of the way in which life goes on under the various aspects of the plan when in operation, [and] feedback of the material thereby acquired into the planning technique for use in the future' (Dakin, 1960, p. 138).

In his 1960 article, Dakin stressed that planning was a cyclical, self-regulating process of concept-action-modification-concept; that is, a circular movement without beginning and without end. Such a conception of the planning process depends upon the continuous feedback of data from the planned and unplanned environment. Dakin expressed this idea in the following way:

> It is essential that we have constant research into the working of what we have already planned and put into effect if we are to make any solid progress in developing our planning skills. If we have planned a residential area we must observe families living in it, traffic moving in it and children growing up over a period of years. This is surely very obvious but it is by no means the practice and planning authorities are not generally conditioned to the idea that they must spend money on a planning project after it has been physically completed.
>
> (1960, p. 138)

The procedure that Dakin has described as 'post-plan analysis' is here termed post-plan evaluation. The latter term is preferred because it implies testing and the making of a judgment, rather than the collection and analysis of data. In this way, the procedure of post-plan evaluation can be distinguished from the activities of monitoring and review. In the Concise Oxford Dictionary monitoring means 'listening to facts and reporting on them,' it does not imply a judgment on those facts; rather, it is the activity of keeping up to date. In contemporary planning practice, monitoring is a form of feedback associated with cyclical or process modes of planning, yet there are probably as many definitions of the term as there are planners. (See, for example, Whitehead, 1974; Haynes, 1974; Harris and Scott, 1974). As Whitehead (1974, p. 962) has pointed out, the term has become a modern 'fashion word' of planning, and indeed, an 'overworked and misused' term. Thus, though monitoring and post-plan evaluation refer to virtually the same planning activities, the latter term is preferred, mainly because it is semantically more accurate, and avoids the confusion surrounding the use of the word 'monitoring'.

Review is also a term which has been subjected to varying interpretations. Chapin (1965), in his progressive approach, uses 'review' at several stages of the planning process, to mean the re-examination of policy decisions prior to a new cycle of planning activity being initiated. In Chapin's scheme, planning decisions are subject to 'review' at each stage of the planning process. McLoughlin (1969, p. 103) uses review to refer to the periodic re-examination of a plan's objectives, programmes, and control mechanisms, to account for changes in the social, economic and political context in which the plan operates. Thus, while Chapin sees review as an evaluative activity for use at all stages of the planning process, McLoughlin uses the term to denote the recording of events to determine whether modifications to planning proposals are necessary. It is not proposed here to redefine the term review; instead, some different interpretations of the word have been outlined to explain the use of the more descriptive term, post-plan evaluation.

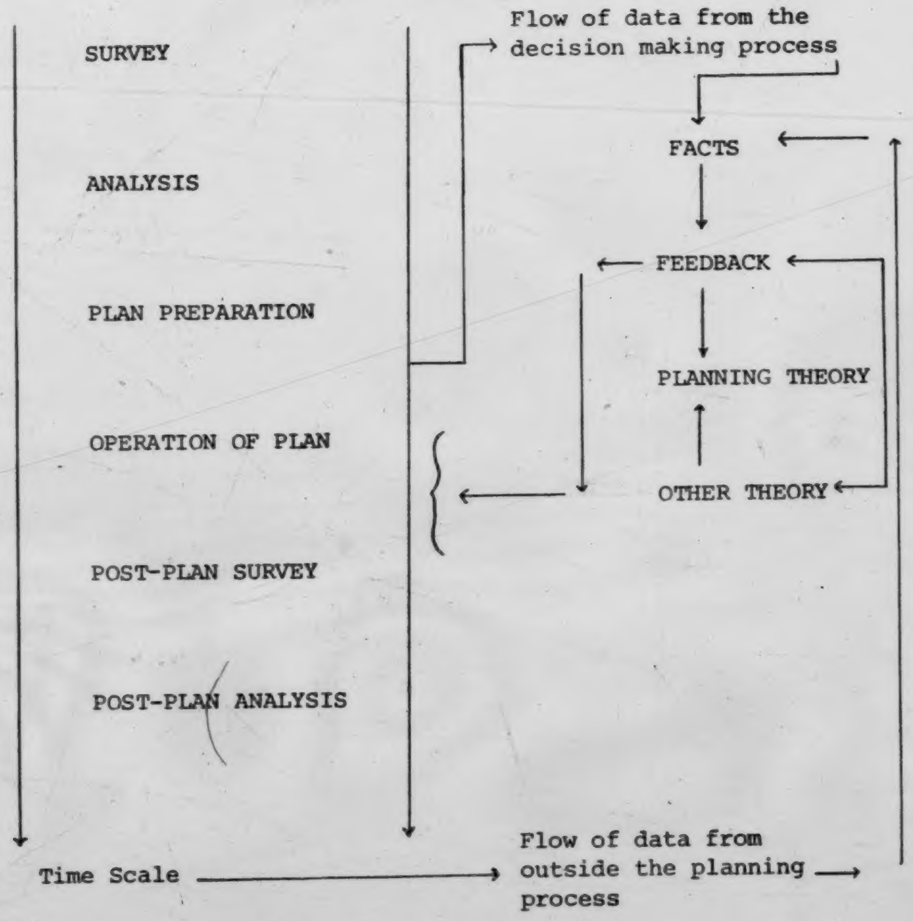
Use of Post-Plan Evaluation in the Planning Process

The role of post-plan evaluative studies is described in Figure 7 which is based on Dakin's (1960) diagrammatic representation of the planning process. In the left hand side of the diagram Dakin has set down his view of the order in which planning activities should occur which reveals that post-plan survey and analysis are activities commenced after plan implementation. The right hand side of the diagram shows that the planning process is affected by certain types of information entering the system: theory supplied from other disciplines and 'facts' coming from the post-plan survey and analysis procedures. Dakin explains that these 'facts' include the "reactions, opinions, attitudes and actions of members of the public responding to planning that has been put into effect" (1960, p. 142). He adds:

> The purpose of the activities on the righthand side of the diagram is therefore twofold. First it is to assist in the systematic further development of planning theory, and secondly to provide a method whereby the planning process as a whole can reap the benefits of its operations in the world of action by learning from its mistakes and successes.
>
> (Dakin, 1960, p. 142)

Figure 7

A Model of a Cyclical Planning Process - According to Dakin


SURVEY
ANALYSIS
PLAN PREPARATION
OPERATION OF PLAN
POST-PLAN SURVEY
POST-PLAN ANALYSIS
Time Scale
Flow of data from the decision making process
FACTS
FEEDBACK
PLANNING THEORY
OTHER THEORY
Flow of data from outside the planning process

Source: Dakin, 1960

Dakin's argument has been supported by Smith, who, in 1970, wrote:

> Planning concepts, policies and programs, should be constantly modified in the light of the experience that is gained from their implementation. And that experience should include the evaluations of the people who have to live with the plans.
>
> (1970, p. 7)

Post-plan evaluations then, are carried out by observing the day-to-day performance of completed planning projects. They can benefit practising planners in several ways. Stein (1966, p. 123) has shown how such evaluations can help planners discern how various planning conceptions have stood the test of time. This information should help planners test the efficacy of new planning theories and hypotheses. The unfortunate history of urban renewal bears testimony to the fact that untried and untested planning beliefs may not be valid in practice. This aspect of post-plan evaluative studies emphasises that planners can learn from, and not repeat their mistakes. This is the fundamental practical benefit of such studies.

> All systems of scientific knowledge and technique advance by self-correction based on acquired experience. This principle of feedback, which is the essential element in automation and of which the key idea is that the product is used to correct the process, will be of increasing importance to planning techniques as our capacity to predict is enlarged.
>
> (Dakin, 1960, pp. 137-138)

Some Selected Case Studies

Despite the passing of nearly two decades since Dakin first set down the advantages of post-plan evaluative studies, there have been few attempts to put into practice his recommendations. There are, however, exceptions to this generalization. Clarence Stein (1957 cited in Smith, 1970) carefully watched the development of several planned New-Town communities for more than twenty years. Herbert Gans (1967) similarly watched over the evolution of Levittown, New York. Bangs and Mahler (1970) conducted a post-plan evaluation of a 1963, Maryland ordinance, requiring developers to set aside a portion of their subdivisions for small local parks. They checked the program to see how well the resulting parks were being used and if the planners' recommendations for determining their size and location were correct. They found that the original intuitive estimates of patterns of use were reasonably accurate, but that adolescents and adults were generally underrepresented in counts of park visitors. They recommended that the recreational needs of these groups be determined by preference surveys.

In another evaluative study, Shaw (1970), used an attitude survey in Kitimat, B.C., a comprehensively planned resource town, to determine how satisfied its residents were with their planned environment. The residents of the planned community were questioned about their feelings towards their town at three levels - home, neighbourhood, and city. The results were compared with those gained from an identical attitude survey conducted in Kimberley, an unplanned mining and smelting town in southern B.C. Shaw's hypothesis was that the residents of the planned resource town would be more satisfied with the quality of their environment. He found that while residents of both towns were generally satisfied, those from the unplanned community were more satisfied at each level studied. However, it was also found that satisfaction was influenced more by social than by physical factors. For example, satisfaction with homes and neighbourhoods increased with length of residence, and Kimberley's residents thought they shared a more friendly social environment. In addition, Kitimat's residents tended to have higher expectations of a planned town and were therefore more critical. Shaw concluded by suggesting that satisfaction in Kitimat would rise with time as a greater sense of community spirit evolved, and that the town's promoters could project a "small town image" in the meantime to reduce the expectations of incoming residents (1970, pp. 172-179).

In a study with similar aims conducted in eleven communities throughout the United States, Lansing, Marans and Zehner (1970) attempted to discern whether residents living in planned communities were more satisfied with their environment than those living in less planned communities. They found that while overall satisfaction was highest in the two most planned communities of Columbia and Reston, other factors were not rated so positively there. For example, as in Shaw's study, neighbours were regarded as more friendly in the less planned communities. In addition, overall satisfaction was not directly related to the degree of planning as low overall ratings were received by moderately planned Montpelier and highly planned Southwest Washington. From these and other findings, Lansing et al. (1970) concluded, as did Shaw, that social factors were more important in determining how content people were with a particular community. In contrast, physical features were seldom mentioned.

In a different social setting Buttimer and McDonald (1974) examined some of the consequences of the use of planning standards in various residential areas of Glasgow, Scotland, to see if the application of such standards affected residents' satisfactions with their communities. The evidence from their survey indicated that a complex interplay of factors was related to satisfaction with life in an area. However, social factors were again important variables. Residents expressing dissatisfaction with their area were more likely to feel that their relatives and friends lived too far away. Yet Buttimer and McDonald did not denigrate the importance of physical factors. They concluded that:

> it is not going to be possible for [the planner] to discard altogether his traditional preoccupation with physical, environmental quality: people do notice the noise from the railway, the lack of a view, or the distance from the bus stop ....
>
> (1974, p. 180)

To summarize, the results of these studies indicate that planners and their clientele may exhibit divergent perceptions of 1) their environmental goals (Shaw, 1970), and 2) the importance of social compared to physical factors in communities (Lansing et al. 1970, Buttimer and McDonald, 1974). The existence of these divergent perceptions points to the need for post-plan evaluation studies so that planners may better judge the values and attitudes of their client populations. Such studies are, however, not without their limitations; these are twofold. First, they are expensive and if they are to be done thoroughly, time-consuming. The example of Clarence Stein in Radburn is pertinent. In practice, planning agencies are typically reluctant to review the operations of completed projects; they often operate under considerable pressure to move on to the next undertaking. There are also budgetary contraints to be considered. Programme budgets characteristically do not include provision for such review procedures.

The second limitation of post-plan evaluative studies has to do with their timing. Those cited above have been conducted on plans that have been implemented and have been in operation for some time. The deviations from the anticipated consequences have been discovered at a stage when it is too late for major adjustments. However, the approach taken by this writer is that studies of the day-to-day operations of completed projects provide information that may save time and effort in the long run by avoiding the needless repetition of mistakes. Similarly, the quality of planning will be improved by providing environments more responsive to users' needs. In the next section, the types of information that planners need for post-plan evaluative studies, and the techniques that can be utilized to collect this information, will be discussed.

INFORMATION REQUIREMENTS FOR POST-PLAN EVALUATION STUDIES

Plans vary according to the scale of their application - for example, neighbourhood, city-level, regional or even national; the functions they are intended to serve - transportation, health services, recreation; the type of resource being considered - for example, water supply, wildlife, forestry; and the time scale of their application - short, intermediate and long range. Therefore, the types of information to be collected and analysed by the members of a planning team are determined primarily by the purpose and type of the plan being prepared.

This thesis is concerned with planning for outdoor recreation in urban areas. In the first section of this chapter urban recreation planning was defined as the application of the general planning process to a contemporary problem - that of providing well designed, properly located recreational facilities that are responsive to the needs of the urban population. The intent of this section is to show, by means of a brief literature review, the types of information that planners require for the successful planning of urban recreational facilities.

Planners and designers of recreational places actively create differing behavioural settings. When questions of the availability of land have been answered, the planner/designer enters the planning process and attempts to provide solutions to problems of form and function. He shapes the environment in such a way that certain activities can take place so that various human needs are met (Aas, 1975). An important preliminary stage in the planner's task is therefore to gather as much information as possible about the people for whom he is planning. Much of this background information can legitimately be gained by intuition, or even by guesswork. For example, the planner knows that certain biological needs must be met in his facilities - we all need to rest, to eat, to drink: these facts are common place. Outdoor recreational facilities, however, are created to satisfy more complex needs than these simple biological exigencies. Aas comments that this thrusts additional responsibilities upon the planner.

> In designing new structures, whether a residential area or a central business district, one will always try to improve on past practices. So if information from the inhabitants themselves is needed, direct attention should be focussed on how best to obtain it. It is, however, a great misunderstanding to believe that information of this kind is already in the hands of a wide range of persons, and that the job of the researcher is just that of assembling it. It is important to obtain information on the inhabitants' ideas, but this information is insufficient. In addition we shall need information obtained in an independent manner on the activities themselves. This stress on the need for such information does not mean that the designer himself and his role become unimportant. Quite the contrary: .... The demand on the designer as a creative force will be stronger rather than weaker in a situation where data are present on and from the inhabitants.
>
> (Aas, 1975, p. 282)

In other words, planners concerned with the provision of outdoor recreation facilities require two types of information; first, information relating to participation in current recreational activities, and second, information on the recreationists' ideas, attitudes and perceptions of existing recreational settings. This presumes that planners can learn from past planning experience and identifies a role for post-plan evaluations in the recreation planning process.

The two distinct types of information described above are both concerned with the interactions between people and their environment. These interactions may be unexpressed, experiential or they may result in physically observable behaviour. The next section deals with how this information may be collected.

Looking or Asking in the Behaviour Setting

Psychologists recognize that human behaviour necessarily implies an interaction between people and their environment. Greater understanding of these interactions has been achieved by social scientists in either of two ways: by asking questions of people in a behaviour setting, or by observing their various behaviours as they take place. Planners and social scientists have tended to favour the technique of asking questions (whether by interview or by self-administered questionnaires) to discover if people are satisfied with the environments they have created. This has been a useful technique because interactions with a given environment may be 'mental' or experiential, and may not be manifested in physically observable behaviour. By asking questions we can discover people's attitudes, beliefs, expectations, perceptions and evaluations.

On the other hand studies from several disciplines have shown that data generated by the asking of questions may be unreliable. There is often a lack of correspondence between what people say they do and what they are, in fact, doing. Moser (1958) has stated that this unreliability in reported answers can be caused by biases of exaggeration, by memory errors, or by 'prestige' effects. Prestige effects refer to respondents wishing to create a favourable impression for the interviewer. Aas (1975) is more charitable and reminds his readers that people often do not report the facts, but report their interpretation of the facts. Other discrepancies may result from the respondent having incomplete information on the subject about which he is questioned or from his misinterpretation of important facts. Observation can overcome some of these weaknesses, but not all.

It follows then, that the planner who is interested in human behaviour and activities in the settings that he has created, has the choice of asking people to report on their behaviour, or of going into the field and observing what they do, or of combining these methods as Winterbottom (1967) did in his study in Colchester, England. He complemented a postal survey with continuous observations of two major recreation grounds to test the adequacy of the standard of 7 acres of open space per thousand population.

The special advantage of the combined approach is that questionnaires and observation studies generate information of different types and are capable of measuring different environmental interactions. Observation can tell the social scientist with an interest in a particular setting how many people use an area, when they use it, what activities they do there, their approximate age groups, and even how long they spend in a setting. What it cannot shed any light on are people's reasons for using an area, whether they are satisfied with the planned environment, and what their perceptions of the various landscape elements in that behavioural setting might be. This latter sort of information can be gained by asking questions.

The recreation planner can benefit from both types of behavioural information. In evaluating the success of a particular structure, facility or larger design, data generated from observing environmental interactions tells the planner how a particular setting is actually being used. Data generated from the answers to questions may help him explain why it is used. Together, the two methods of inquiry should allow insight into the behavioural consequences of particular environmental structures which would ultimately have value in the formulation of action programs for the planning of new areas, or for improving existing ones.

In conclusion, it is suggested here that to plan comprehensively for community leisure patterns, planners need information not only on existing community leisure activities, but also information pertaining to the tastes and preferences of the community planned for, the make-up or characteristics of that community, and some measure of community attitudes towards existing recreational opportunities. To be able to learn from past planning experiences presumes efficient methods of collecting and feeding back information from post-plan evaluations into the planning process. Observation studies and interview questionniares are two viable methods for the collection of such information. The study reported on here utilizes both of these methods in the post-plan evaluation of an urban recreational facility - Mayfair Park.

SUMMARY

In this chapter planning has been defined as a process of human thought and action initiated by thought for the future. It is regarded as a very general human activity that is applicable in many contextual situations. Urban planning, for example, deals with the arrangement of spatial patterns over time. Urban recreation planning seeks to provide recreational facilities and opportunities that are responsive to the needs of city residents. In practice, planning takes place within an administrative and procedural system termed the planning process. A great amount of debate is evident in the planning literature concerning the planning process: there seem to be as many definitions and models of the process as there are writers on the subject. For this reason no representative approach exists, though it is possible to discern two major opposing perspectives within the literature. These are the traditional | static | blueprint approach and the innovative | dynamic | process mode of planning. The significance of these differing conceptions of the planning process for this thesis is that each envisages a different role for evaluative studies. In the traditional approach evaluation is confined primarily to the plan preparation stage of the planning process. In the innovative or process modes of planning, evaluative studies take place within a cyclical, cybernetic system which includes a role for the review and evaluation of the performance of completed planning projects, in other words, post-plan evaluations.

In this chapter it is suggested that we must study and analyse the environmental and behavioural consequences of completed, planned environments in order to plan for the future. These studies should include the reactions and opinions of the people who are living with the plans. That this is desirable is indicated by the review of the few post-plan evaluations that have been attempted - these studies reveal that perceptual gaps can exist between planners and their clientele. To bridge these perceptual gaps, it is suggested that planners need information about the people for whom they are planning. Some of this information can be gained by intuition, but not all - planners must ask questions to uncover the opinions and attitudes of the public they are to serve, and they must observe what people do in the planned environments they have created. Only in this way can planners learn from the plans that have been implemented.

CHAPTER III

THE PLANNING AND DESIGN HISTORY OF MAYFAIR PARK: CONCEPTS AND METHODS

INTRODUCTION

Mayfair Park was conceived, planned and developed between 1953 and 1973, during most of which time the City of Edmonton had no published master plan to coordinate planning in parks and recreation. The current Edmonton Parks and Recreation Master Plan, 1970-1980 was not adopted by City Council until September 27, 1971. Therefore, to reconstruct the planning philosophies and concepts that were used as a rationale for the creation of Mayfair Park, it was necessary to interview the individuals responsible for its planning and design. Fortunately, four of the park's planners still practice in Edmonton and were contacted and interviewed.

Secondary sources of background information were found in the published and unpublished reports of the City's various planning departments, in the City's correspondence files, and occasionally in the Minutes of City Council debates. These sources reveal that Mayfair Park was developed at a time when considerable economic pressures were being exerted on City Council to allow the river valley in Edmonton to be used for non-recreational purposes. For example, the record shows that Council was balancing demands for conservation of the river valley against a strong expressways lobby. Moreover, it is evident that Council had no firm guiding policy to assist in its decisions until the publication of the Edmonton General Plan in 1967.

To guide decisions during this period Council relied upon a series of reports commissioned by various interest groups. These reports and other documents provide important background information necessary for an understanding of the policies and philosophies that have shaped the development of Edmonton's parks and recreation areas. While this information is both comprehensive and interesting, not all of it is relevant to the aims of this thesis. A discussion of the major trends in parks planning in Edmonton as revealed by these documentary sources is presented in the first section of this chapter.

The second part of this chapter deals with information gained from the series of planning interviews. In all, a total of 16 interviews was held between Wednesday, November 17, 1976 and Thursday, January 20, 1977. The documentary record was first explored thoroughly, partly to identify key participants who should be interviewed, and partly to provide the best possible base of information from which to approach the interviews.

THE DOCUMENTARY RECORD: PARKS PLANNING IN EDMONTON

Development of the Parks Department

Edmonton's first Parks Department was formed in 1912 with the aim 'to manage, control and embellish' parkland in the City (Parks Master Plan, 1971, p. 13). It was disbanded two years later, after the collapse of the land and construction boom that Edmonton had experienced between 1906 and 1913. For the next thirty years, parks and recreation development continued in a piece-meal fashion under the control of the City Engineers Department. Little concerted parks planning occurred until City Council formed the Recreation Commission in 1944 and reestablished the Parks Department three years later. These two departments were amalgamated in 1962, forming a Parks and Recreation Department which was responsible for the planning, design and development of parkland in Edmonton (Annual Report, Parks and Recreation Department, 1963). This department is now named Edmonton Parks and Recreation and it functions in a somewhat broader manner, being responsible for the development of recreation programmes, in addition to its earlier roles. Figure 8 is a flow chart showing the present organization and functions of Edmonton Parks and Recreation.

The Period 1955-1963

Prior to the publication of the Parks Master Plan in 1971, the most significant guide to the development of recreation areas in Edmonton was provided by the "Report on Active and Passive Recreation, Park and Open Space Facilities Within the City of Edmonton with Recommendation as to Immediate and Future Needs", issued in January, 1955 (hereafter known as the 1955 Report). Described by the City Council's Bylaw Committee as "one of the most important documents Edmonton has ever had" (Edmonton City Council, Minutes, September 12, 1955), the 1955 Report contained a general statement of philosophy: "City parkland is for the use of all citizens. It should not be leased or sold to private individuals or groups with limited or restrictive membership." A standards approach to the provision of parkland was advocated as a means of implementing this philosophy. The space standard adopted by the authors of the 1955 Report resulted from a modification of the National Recreation and Parks Association recommendation of 10 acres (4 hectares) per 1,000 population (N.R.P.A. 1962). Table 2 compares parkland standards recommended by the

PLAN CIRCULATION FLOW CHART

EDMONTON PARKS AND RECREATION

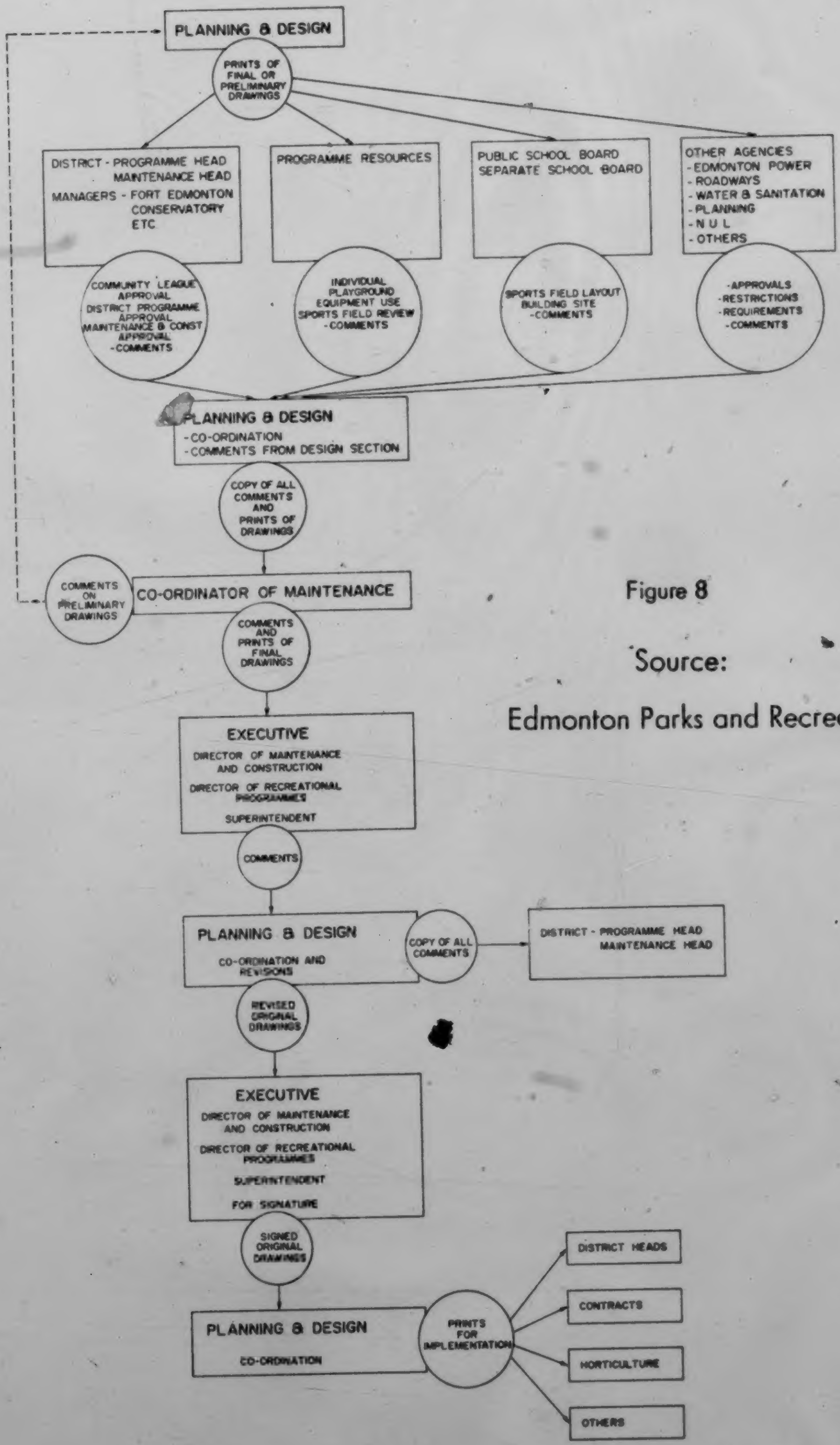

PLANNING & DESIGN
PRINTS OF FINAL OR PRELIMINARY DRAWINGS
DISTRICT - PROGRAMME HEAD
MAINTENANCE HEAD
MANAGERS - FORT EDMONTON
CONSERVATORY
ETC
PROGRAMME RESOURCES
PUBLIC SCHOOL BOARD
SEPARATE SCHOOL BOARD
OTHER AGENCIES
- EDMONTON POWER
- ROADWAYS
- WATER & SANITATION
- PLANNING
- N U L
- OTHERS
COMMUNITY LEAGUE APPROVAL
DISTRICT PROGRAMME APPROVAL
MAINTENANCE & CONST APPROVAL
- COMMENTS
INDIVIDUAL PLAYGROUND EQUIPMENT USE
SPORTS FIELD REVIEW
- COMMENTS
SPORTS FIELD LAYOUT
BUILDING SITE
- COMMENTS
- APPROVALS
- RESTRICTIONS
- REQUIREMENTS
- COMMENTS
PLANNING & DESIGN
- CO-ORDINATION
- COMMENTS FROM DESIGN SECTION
COPY OF ALL COMMENTS AND PRINTS OF DRAWINGS
COMMENTS ON PRELIMINARY DRAWINGS
CO-ORDINATOR OF MAINTENANCE
COMMENTS AND PRINTS OF FINAL DRAWINGS
EXECUTIVE
DIRECTOR OF MAINTENANCE AND CONSTRUCTION
DIRECTOR OF RECREATIONAL PROGRAMMES
SUPERINTENDENT
COMMENTS
PLANNING & DESIGN
CO-ORDINATION AND REVISIONS
COPY OF ALL COMMENTS
DISTRICT - PROGRAMME HEAD
MAINTENANCE HEAD
REVISED ORIGINAL DRAWINGS
EXECUTIVE
DIRECTOR OF MAINTENANCE AND CONSTRUCTION
DIRECTOR OF RECREATIONAL PROGRAMMES
SUPERINTENDENT
FOR SIGNATURE
SIGNED ORIGINAL DRAWINGS
PLANNING & DESIGN
CO-ORDINATION
PRINTS FOR IMPLEMENTATION
DISTRICT HEADS
CONTRACTS
HORTICULTURE
OTHERS

Figure 8

Source:

Edmonton Parks and Recreation

N.R.P.A. with those advocated for the City of Edmonton in the 1955 Report; departures from the N.R.P.A. standards are evident.

As outlined in the 1955 Report, facilities in Edmonton were to be provided at five levels of service: neighbourhood, community, district, city and regional. For the most part, these recommended standards have been adhered to, although some losses of city-level parkland have occurred. In particular, the Royal Glenora Club obtained a 25-year lease, effective September 2, 1958, for 8.65 acres (3.5 hectares) of river valley land at the east end of the Municipal Golf Course (Edmonton City Council, Minutes, August, 1958). Furthermore, as a result of the construction of the Groat Road expressway, a 27-hole full par golf course was reduced to a less challenging 18-hole course.

TABLE 2

A COMPARISON OF PARKLAND STANDARDS: N.R.P.A. AND THE 1955 REPORT

CATEGORY OF PARK	N.R.P.A. STANDARD	1955 REPORT	
Neighbourhood Use	1.25 acres/1,000	Parks	0.75 acres/1,000
		Play Lots	0.50 acres/1,000
Community Use	none	Landscaped Parks	1.0 acres/1,000
District Use	1.25 acres/1,000	District Parks Athletic Fields	1.00 acres/1,000
City Use	2.5 acres/1,000	City Parks	4.0 acres/1,000
		Natural Areas	1.0 acres/1,000
		Golf Courses	3.5 acres/1,000
Specialized Use/ Regional Level	5.0 acres/1,000	Regional and Rural Reservations	5.0 acres/1,000
TOTAL	10.0 acres/1,000	TOTAL	17.5 acres/1,000

Source: Edmonton Parks and Recreation Master Plan 1970-1980, p. 27

Note: 1 Hectare = 2.47 acres

Though an important guide to the formulation of a firm parks policy, the 1955 Report was a recommendation rather than a definitive document. Despite this, certain consequences for parks planning in Edmonton can be traced directly to this report; first, the commitment to a hierarchy of parks, varying in size from small neighbourhood parks to large city parks, and, second, the egalitarian notion that as much of the river valley as possible should be reserved for parkland and related public uses.

This attitude towards the use of the river valley in Edmonton was consolidated and strengthened in the years between the adoption of the 1955 Report and the publication of the Parks Master Plan in 1971. The minutes of City Council debates often reveal this trend. For example, a special meeting of council was convened on April 4, 1960, to discuss the future of the metropolitan river valley. Addressing this meeting, Professor Gordon Stephenson, Head of the Division of Town and Regional Planning of the University of Toronto, said that, because of the recent growth in Edmonton's population, the river valley "should eventually be turned into a park throughout the city. The valley may seem to be big now, but will be very small when the city reaches a million in population. The valley within 10 or 20 years should be turned into a park, and it is essential that planning be done now" (Edmonton City Council, Minutes, April 4, 1960).

The City of Edmonton Parks Department Annual Reports from this period continue to impress upon City Council the need to provide land within the river valley for public recreation. Chief advocate of this position appears to have been the then Superintendent of the Parks Department, J.R. Wright. He believed that the functions of a

Parks Department were

> to advance the well being, both physical and mental, of the inhabitants of today's crowded cities; to stimulate interest in, and awareness of, beauty; to grant, through tranquility, escape from the emotional turmoil of our hurried lives; and to provide the facilities for relaxation, through participation in group activities.
>
> (J.R. Wright, Foreword, Parks Department, Annual Report, 1959, p. 3)

To carry out these functions, Wright proposed that the recently formed Department of Parks and Recreation prepare a report on the river valley in relation to its recreational land use (Edmonton City Council, Correspondence Files, December 28, 1962). An "Interim Report on Land Use and Land Reservation for Public Recreation in the North Saskatchewan River Valley" was subsequently put before City Council in January, 1963 (hereafter known as the 1962 Interim Report). This report contained an inventory of existing park and recreation facilities, a broad conceptualization of an integrated parks system for Edmonton, and a long range park development programme, together with a list of development priorities.

The essence of the proposed river valley park system was described in the report as follows:

> The function of the park system in the river valley, as it is conceived, should provide space for various recreational activities in natural surroundings as close to nature as possible. Verdure of trees and grass, open sky and water would be the main structural elements. Some formalized areas necessary to provide field and court facilities will be included. Minimum architectural structures and engineering will be necessary for convenience.
>
> (Interim Report, 1962, p. 50)

In designing this park system, certain development priorities were laid down in the report thus:

> The first consideration will be given to the largest number of citizens, regardless of their status, who, as the trends point out, are interested in spending their leisure time in the open, natural surroundings. Therefore, the largest acreage of park will be awarded for family and group picnics, walks, trails.
>
> (*Interim Report*, 1962, p. 51)

Among the recommendations outlined in the 1962 *Report* and later adopted in principle by Edmonton City Council, three are particularly relevant. They are as follows:

> 1. Rezoning: All public parkland in the river valley should be rezoned from A - Parkway to AP - Public park. This step is essential to establish definite use of the land and to prevent encroachment on parkland.
>
> 2. Acquisition and Consolidation: Acquisition of privately owned land within the river valley should take place according to the program outlined in the Parks and Recreation Master Plan (which is under preparation). Consolidation of the land is necessary to assure uniformity and continuity in the development and in effective functioning of the recreational facilities in the valley.
>
> 3. Development: Development of parkland for public recreation use within the river valley should be accelerated and should proceed according to the program outlined in the proposed Master Plan. Acceleration of the development would open to the public parkland which is already designated for recreational use, therefore meeting great demands for, outdoor family recreation, especially picnicking.
>
> (1962, pp. 1-4)

These recommendations are justified in the 1962 Report by reference to future recreational needs based on a projected city population of 632,625 by 1980, and on the minimum standards for park spaces as laid down by the 1955 Report. On the basis of these projections, it is found that, in 1980, 5,341 acres (2,163 hectares) will be needed to satisfy the demands for parkland in Edmonton (Interim Report 1962, p. 30). The authors of the Interim Report state that most of the potential recreational land in the City exists in the river valley (4,865 acres: 1,969 hectares), and that even if all of this land were to be developed by 1980 there would be a deficiency of 476 acres (193 hectares). Because of this projected deficiency of parkland, the Interim Report closes with a final appeal for comprehensive planning again lamenting the lack of a parks and recreation master plan to guide development (1962, p. 49).

In effect, the Interim Report was a major summarizing document, detailing major trends in parks planning and development in Edmonton from the publication of the 1955 Report to the beginning of 1963. It is a document that reveals many of the planning notions espoused by the decision-makers responsible for Edmonton's current parks system. The Annual Reports of the Department of Parks and Recreation reveal that many of Edmonton's major parks were designed and built during this period. Therefore, the Interim Report (1962) is a concise guide to the concepts and concerns prevalent among the planners and decision-makers of that era. Among these concepts, the following five are predominantly responsible for the current form of Edmonton's parks system.

1. The commitment to the notion of a hierarchy of urban parks. This planning concept is clearly expressed in the Edmonton General Plan (1967, p. 82) in the following manner:

> Recreational facilities should be planned and allocated to serve all age groups on the following design basis:
>
> a) Neighbourhood Level
>
> b) District Level
>
> c) City Level
>
> d) Regional Level

An identical hierarchical system has been utilized in the Edmonton Parks and Recreation Master Plan 1970-1980.

2. A related concept is that the elements of the park system should be integrated to provide a complete range of recreational activities within the urban area, thus maximizing the choices available to the public. Integration of recreational facilities within the city reduces travelling time and expenses, aiding those who cannot afford to belong to private clubs or to travel to recreational facilities outside the city limits. An attempt has been made at creating such an integrated parks system in Edmonton, particularly within the metropolitan river valley (see Figure 2).

3. A recognition that the North Saskatchewan River Valley is the dominant physical unit in the Edmonton metropolitan area is

explicit in the 1962 Report. The authors of the Report argue that the parks system should be designed to emphasize the lineal character of this landform. The result has been a continuous zone of parkland which bisects the metropolitan region and creates for Edmonton a unique 'personality'.

4. A strong belief that one of the functions of a city parks system is to provide opportunities to escape from the pressures of the urban environment is embodied in the Interim Report (1962). For parks to function in this way they need to be designed to resemble 'natural' landscapes or settings, and evoke an atmosphere of tranquility. Hence, the large city parks are commonly situated in the river valley on land that has often been left in a natural state.

5. Another prominent planning concern in the 1962 Interim Report is the utilitarian notion that the greatest amount of park space should be provided for the greatest number of users - the general public. By extension, this philosophy has resulted in a majority of Edmonton's city-level parks being designed for family and small-group uses, for example, picnics, barbeques, and other informal social activities. In 1962 it was established that more than three-quarters of Edmonton's taxable population (75.5 percent) was in the $5,000.00-and-under income bracket (Interim Report, 1962, p. 32). It was therefore felt that the large city-level family parks planned and developed at this time, should be free to all visitors. Mayfair was one of these parks.

THE EVOLUTION OF MAYFAIR PARK

Planning and Construction History

An early reference to the site of Mayfair Park shows the area as 'Windsor Terrace', a proposed residential subdivision comprising more than 500 lots. This development never materialized and, as a result, the property owners were unable to pay their tax arrears that had accumulated after the collapse of the land boom in 1913 (Edmonton Parks and Recreation, Correspondence Files, December 15, 1972). In 1916, at the request of Edmonton City Council, the City Charter had been amended by the Province to allow the city to sell or acquire property in arrears if it were not sold within an allotted time period (Dale, 1969, p. 158). In this way the City acquired the Windsor Terrace property in the 1920's. Its total area was 450.85 acres (183 hectares), and while much of it remained in a natural state, some 185.5 acres (75 hectares) were leased to the Mayfair Golf and Country Club Ltd. in 1921 for a period of 21 years. This lease was renewed in 1939, enabling the club to retain its holding until 1981 (Bedford, 1976,pp. 118). On another part of the site the City began a gravel extraction and crushing operation in the 1930's, and this activity continued until 1961.

For most of this period the development of new parkland within the city was the responsibility of the Engineers Department. In these years few new parks were constructed. Six years after the reformation of the Parks Department however, the Recreation Commission recommended to City Council that the area immediately south of Mayfair

Golf Club be developed as a large city park (Annual Report: Recreation Commission, 1953, p. 3). Council was told this was necessary as the site was lying idle, and was subject to the illegal tipping of garden and household refuse. Council was also told of the need for additional large parks, especially river valley parks, as at this time few such parks were in operation.[1] Moreover, these existing parks were predominantly summer use facilities and City Council was persuaded of the need for a large winter park (S. Maslo, November 30, 1976).

Early in 1959 the City's Parks Department under Superindendent J.R. Wright and Construction Engineer S. Maslo began topographical surveys of the site to gather information for the planning of a new park. At the same time a series of informal 'brainstorming' meetings of the design and planning staff of the Parks Department was being held. At these meetings staff members put forward their ideas regarding development of the area (Edmonton Parks and Recreation Correspondence files: December 6, 1971). Minutes were kept of these informal meetings and one entry dated April 4, 1960, shows that a long checklist of possible facilities, for both summer and winter use, was prepared. The Minute is titled 'Mayfair Park: Suggested Installations' and it is interesting to note that many of the proposed facilities, for example family picnic sites, the pavilion, the lake, the hiking trails, have subsequently been constructed. From these minutes it can be deduced that the proposed park was to be a highly developed facility for intensive use. For example, a miniature golf

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course, a figure-skating and roller-skating rink, a boat-docking pier, shuffle-board courts and horse-shoe pitches were among the facilities considered for inclusion.

From these brainstorming sessions a clear conception of the form and functions of Mayfair Park was formulated. The proposed park was to be a:

1. Large, city-level park of approximately 160 acres (64.8 ha).

2. 'Park for all seasons' (Edmonton Parks and Recreation, Correspondence Files, November 21, 1968); in other words, the park was to be designed with facilities to encourage year-round use.

3. Family park; that is a park that would encourage family-type activities such as picnicking, boating and fishing in summer and social skating in winter. A related concept was that the park was designed to promote use by small family and social groups. Large group activities, even large group picnics, and organized, programmed activities were to be discouraged. 'Family use' was therefore a concept that referred to the size of the visitor group as well as the type of activity envisaged.

4. 'Free park'; that is, physically and economically accessible to all residents of Edmonton. It would contradict this philosophy to allow leasing of the park, or part of the park, for programmes or facilities. No charges were to be levied for entry, parking, or use of any of the facilities.

5. 'Total recreation concept' (Edmonton Parks and Recreation, Correspondence Files, October 30, 1963); in other words, the park was to be designed to provide for a wide range of 'free play'

activities. To encourage this type of use the park was to be designed with a variety of landscape elements including flat, grassy, open fields for active-type pursuits, and more secluded, private, wooded enclaves for the more passive, retreat-type activities. A wide variety of activities was also proposed and included in the preliminary drawings. (S. Maslo, R.B. Wilson, December 14, 1976).

The idea of the central lake for boating in summer and skating in winter evolved during the course of these informal planning sessions. Because of the area's previous use for gravel mining, the excavations for the lake were already completed. In addition, an available supply of compactable, impervious blue clay, suitable for the base of the lake, was located nearby. It was also felt by the participants in these meetings that the idea of a lake was compatible with the family use/all season park concept. Thus, the 14 acre (5.7 ha) lower lake was incorporated into the early designs.

Originally, there were to be two lakes in the completed facility, the existing lower lake, and an upper lake of 8 acres (3.2 ha) to help circulate the water and prevent the growth of algae. The upper lake was eventually reduced in size to little more than an ornamental pond to allow for the inclusion of an adventure playground in the eastern section of the park.

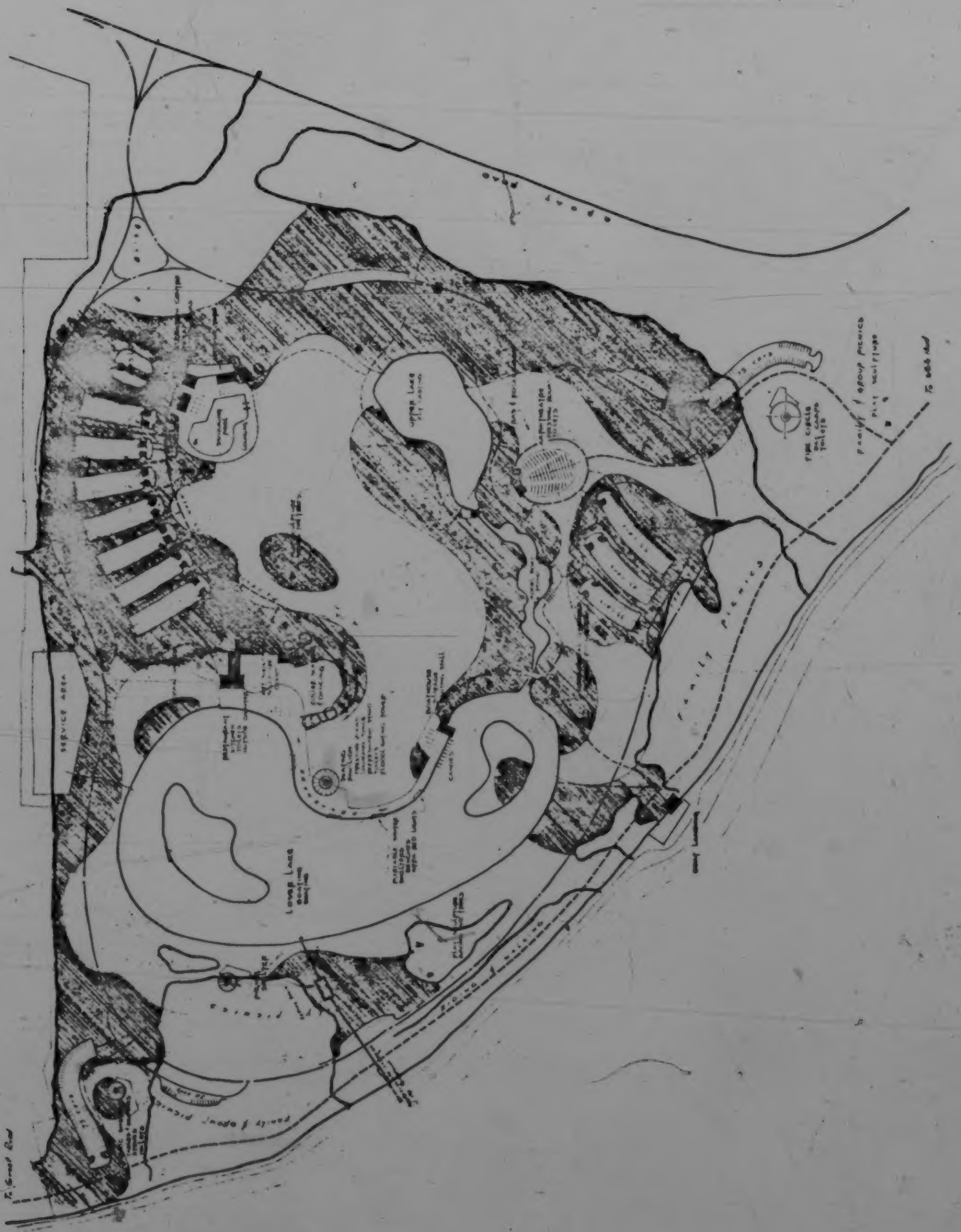
By the winter of 1960-1961 the preliminary planning and designing of Mayfair Park was well advanced and construction began on the site in 1961. A grading plan was next formulated and used as a guide for regrading the entire park area. Builders and contractors having clean clay fill for disposal were encouraged to dump this material on the site. To attend to the security of the park a caretaker was taken on and gates were erected. The caretaker lived in a small house in the park and directed the tipping of the clay fill according to the dictates of the grading plan. In this manner the Parks Department was able to build much of the subgrade of the park with a minimum of expense.

The basic plan of the park was revised in certain details (parking, road alignments, upper lake, service area) from time to time and construction proceeded according to a continually up-dated design (S. Maslo, November 17, 1976). A water circulation system for the park's lakes, and a drainage system were next installed and were operating by October, 1964 (Edmonton Parks and Recreation, Correspondence Files, December 15, 1972). The lake was opened for social skating during the winter of 1964-65 with a minimum of amenities, for example, parking facilities and 'privy' toilets. Figure 9 shows the conceptual plan for Mayfair Park as it had been formulated by November, 1964.

With the increasing concern over the future of land in the river valley, the rate of development of Mayfair Park was stepped up. A firm of architects was engaged to design the skating pavilion and the shelter buildings while work continued on grading, planting, seeding, the water supply and curbing and guttering.[2] The architects were given several guidelines by the Parks and Recreation Department. First, the locations of the buildings were given so that there would be washrooms conveniently placed throughout the park. The pavilion was located in the northern-central section of the park close to the main parking lot and the skating area. Second, the architects were given free reign with regard to the design of the buildings, though

Figure 9

Conceptual Plan for Mayfair Park: 1964


SERVICE AREA
Lower Lake
Upper Lake
family picnics
family & group picnics
Fire Circle

Source: Edmonton Parks and Recreation

they were to strive for the effect of uniqueness. In other words, the structures were to be showpieces, never to be duplicated elsewhere (B. Card, January 20, 1977). They were completed and opened in 1968.

Between 1966 and 1968 an underground irrigation and utility supply system was installed. Continued planting of grass, trees and shrubs, and the completion of the service yard and buildings were the other major developments during this time. A minute of a Parks Department meeting held on November 19, 1968, shows that the main development priorities at that time were to complete the landscaping and the picnic facilities, to pave the roads and parking areas, to purchase paddle boats for the lake and to install the park's system of lighting.

These minutes are revealing in that they describe fully the evolution of the design of Mayfair Park. It is apparent that from 1959 through to 1968 the park's design was continually being modified even as construction was taking place. For example, the original designs called for the inclusion of a swimming pool, a licensed restaurant, a roller skating plaza and an outdoor theatre. The Parks and Recreation Department Minutes show that the outdoor theatre was not built because it was feared Edmonton's climate might preclude its use for all but a few evenings each year (November 28, 1968). It was also agreed at this time that first priority should be given to facilities which would attract the public to the park. The restaurant and other lower priority facilities would be built when the park was well attended (Edmonton Parks and Recreation, Minutes November 19, 1968).

By the summer of 1968 the design and development of the park was substantially complete. Since that time a system of walking trails has been provided (1971) and an adventure playground for children was completed in 1973-74. Future plans call for a restaurant and eventually a swimming pool to be added, yet no fixed timetable has been formulated for these developments. It is possible that these facilities will be completed when the Mayfair Golf and Country Club lease reverts to public use adding a further 185.5 acres (75 ha) to the size of the park (S. Maslo, January 20, 1976).

ANTICIPATED USE PATTERNS

The chief purpose of the planning interviews was to determine the philosophies and concepts underlying the development of Mayfair Park. A second intention of these interviews was to uncover the use patterns to be encouraged by particular aspects of the park's design. To do this, small 8 x 11 inch sketch maps of the site development plan of the park were given to each of the interviewees who were then asked to indicate on the sketches the functions of the various sub-areas of the park. In general, this approach yielded disappointing results. However, the method did serve to indicate some problem areas in the park's design.

All interviewees stressed that the whole park was for family picnics rather than large group gatherings, yet the park attracted a degree of large group use. Two interviewees mentioned that evening use levels were not as high as they were intended to be. The road will therefore be lit at night to encourage evening use. The same two planners thought that the access roadway was the chief problem in the design and, if it remains, may have to be modified. Visitors are apparently reluctant to park in one of the parking lots, preferring to park on the roadway as close to the picnic sites as possible. This has resulted in congestion of the roadway on occasion, and has also meant that the large area in the centre of the park is not used by many visitors as it is some distance away from the road.

In the open, grassy areas of the park, it was envisaged that a wide variety of flexible, "free-play" activities would occur. This term was used by the interviewees to refer to vigorous, unorganized activities such as football and other ball games for which a large area of unobstructed open space is required. The central area of the park was designed for these activities. This flat, open area was also designed to serve an aesthetic function - it would highlight the visual impact of the large lower lake and contrast with the more wooded areas surrounding the western and southern perimeter of the park.

The extreme eastern section of the park is a gently undulating, landscaped area, containing a variety of wooded and open spaces. It was designed primarily as a 'buffer zone' to reduce traffic noise from the nearby Groat Road expressway. This section serves an aesthetic function and was intended for free play activities, with some family picnicking intended in the more wooded enclaves. The northern part of the park that borders the Mayfair Golf and Country Club property was similarly designed as a buffer zone, with no clear guidelines as to the types of activities to be encouraged there. It appears that this part of the park is space "left over", rather than an area to be used in a particular way.

Family and small-group activities were encouraged in the western and southern parts of the park, the areas furthest from the expressway. These areas are natural in appearance and the picnic sites are scattered amongst the trees which act to inhibit vigorous games like football. The roadway bisects these picnic areas so families with a lot of equipment can park close to their preferred site.

The pedestrian and horse trail which overlooks the river was designed as part of an integrated trail system that connects Mayfair Park with Whitemud Park to the south and Kinsmen Park to the north. On this trail, walking, jogging and horseriding are the expected summer activities while cross country skiing is envisaged in winter. Much of the trail is cut through natural, wooded areas, creating an atmosphere of peace and quiet. The interviewees expected that this would encourage solitary, passive activities, in addition to the more active pursuits.

THE SEQUENCE OF PLANNING EVENTS IN THE DEVELOPMENT OF MAYFAIR PARK

The planning and developmental history of Mayfair Park describes a sequence of events that are presented here in model form as Figure 10 which indicates that essentially six stages of planning activity were involved. A description of these stages follows.

1. Decision to Adopt Planning

This stage cannot be pinpointed to an actual date. Rather, the decision to create Mayfair Park had its roots in the recommendations made by the 1955 Report which drew on analytic work conducted between 1953 and 1955. The Report identified a possible shortage of developed parkland in Edmonton by the 1980's and argued for an accelerated parks development programme. This programme was to be based on a hierarchy of parks, and the first development priority outlined in the Report was for large city-level parks. Following the

FIGURE 10

Mayfair Park: Sequence of Planning Activities

DECISION TO ADOPT PLANNING

Recognition and definition of relevant problems

PRELIMINARY BACKGROUND STUDIES

Forecasting of trends and estimates of demand for parkland
Determination of needs
Data collection and analysis

FORMULATION OF GOALS

Determination of objectives
Evaluative criteria for design phase established

PLAN DESIGN

Generation of conceptual plans
Collective choice of best conceptual alternative
Generation of check-lists for possible facilities
Collective choice of facilities for inclusion
Generation of alternative site development plans
Collective choice of preferred alternative
Detailed site planning

IMPLEMENTATION

Formulation of a development program
Choice of contractors for construction of facilities
Completion of development program

REVIEW

Observation of the consequences of the completed park
Identification of problems
Adjustment of the design, where possible

acceptance of the Report by Edmonton City Council in September 1955, the Parks Department began to consider a number of potential park sites for development. The vacant land lying immediately south of the Mayfair Golf Club was one of these.

2. Preliminary Background Studies

By the winter of 1959, the Parks Department had decided that the Mayfair site was to be developed. As this decision was being reached, background analytical work was being conducted to assess the demand for parks development in Edmonton. During this stage of the planning process, projections of the future population of the planning area were made, and the demand for parkspace in the city was calculated by multiplying these projections by the attendance rates reported for existing city parks. Most of this analytical work was of limited value and of questionable quality. For example, the statistics compiled to assess demand for urban parkland in Edmonton reflected current participation rates in various activities and were based on the intuitively derived assumption that similar rates would continue until the forecast horizon year (in this case 1980). Moreover, these background studies were undertaken to determine recreational needs for the City rather than to measure the demand for the development of a park on the Mayfair site.

It appears that the decision to develop the park was rationalized after the event instead of being justified on the basis of the analytical work done. The rationales used to defend this decision were characteristic of what Gold (1973) and Burton (1976) have termed the traditional approach to urban recreation planning (see Chapter 2). References to minimum standards, to the need for 'progress' and to the societal 'trend' situation typify this approach.

To sum up, in this stage of the planning of Mayfair Park, the background analytical work was aimed, not at defining the particular recreational needs of the City's population, but at justifying (rather poorly) a decision that had already been made.

3. Goal Formation

Goals and objectives were formulated on the basis of the trends identified from the background analyses. An Inventory of the supply of existing recreational facilities was undertaken and the results were compared with the trend situation to highlight deficiencies. In a similar manner the supply inventories were then compared against the desirable standards for parkland in Edmonton as established by the 1955 Report.

The goals that were formulated as a result of this procedure were the notions that have been alluded to earlier in this chapter. They include the following:
1) the park should be physically and economically accessible to all;
2) it should provide for a wide range of recreational activities, active and passive, in summer and winter;
3) it should be a 'family' park and appeal to people of all ages and
4) it should be a large, city-level park with a variety of natural and landscaped areas. These goals also formed the evaluative criteria to be utilized during the design phase of the planning task.

This approach to goal formation is typical of the traditional planning approach. No detailed surveys were made prior to the application of standards to determine needs; rather, these standards (as laid down in the 1955 Report) were treated as ends to be achieved, as the real goals to be attained.

4. Plan Design

With the goals and objectives established, the planning team formulated a series of broad conceptual plans based on the evaluative criteria as laid down in the preceding planning stage. These conceptual plans were created at a number of "brainstorming" sessions; The lake was the central design element in these early drawings, it could be used for summer and winter activities, and it was compatible with the idea of family use. Next, the picnic sites were established, the circular roadway was roughly sketched in, and the locations of the buildings were determined. At the same time, lists of facilities to be included in the park were being formulated and checked against the evaluative criteria. In this way, informal evaluations took place at every step of the design phase, as the sketches were being progressively refined. Detailed plans for site development were the final outcome of this process.

5. Implementation

This phase of the planning operation involved the establishment of a construction programme, the selection of contractors to build the park's facilities, and the supervision of this programme. Some of the decisions reached during the design phase of planning were compromised in the process of implementation. This occurred partly as a result of budgetary limitations (for example, the proposed swimming pool has not yet been built), and partly as a result of reconsiderations in the priorities of the development programme (for example the bandshell was considered impractical).

Implementation of the works programme took place between

1961 and 1968 with some minor additions taking until 1973 to complete. Some adjustments to the site development plans occurred during this phase. These were the result of continuing evaluations with regard to the practicality of the design and related factors.

6. Review

This stage in the planning of Mayfair Park began shortly after the completed facility was opened to the public and has since operated concurrently with the implementation phase. With the exception of a parks user survey undertaken in the summer of 1971, review has been informally conducted. Review procedures have included observations of the consequences of the completed park, the identification of problems such as conflicts between uses, and the adjustment of the design wherever this has been possible. The observations and the results of the 1971 survey have indicated that use levels have been generally higher than those anticipated. Development of additional facilities has been stalled since that time so that attendance levels are not increased further.

An Overview

The sequence of planning events in the development of Mayfair Park describes, for the most part, a traditional view of the planning process (Gold, 1973; Burton, 1976). This traditional view is characterized by the perspective that planning is the responsibility of a professional and technical elite. Citizen participation is rarely invited and therefore the views of the public are not heeded. In the planning of Mayfair Park, six major decision-making stages or phases of planning activity have been identified. In none of these stages was citizen input considered necessary.

The decision to adopt planning was made when a potential park site became available, rather than as a result of careful analysis of the total leisure environment of the City of Edmonton, or "scanning of the environment", to use Chapin's (1965, p. 33) term. This decision was justified by the statistical techniques characteristic of the traditional approach. These are: measuring the use of existing facilities, forecasting the increase in population in the planning area, and then using these statistics to point to the need for additional facilities.

Goals were then formulated with only vague references to the statistical work done in the background studies. They reflected instead the intuitively derived conjectures of the planning agency as to what were the recreational needs and wants of the public. However, having formulated the goals and objectives for the planning task at hand, the Parks Department adhered rigidly to the guide they provided. For example, in the design phase, these goals and objectives were used as evaluative criteria. They provided guidelines with which to evaluate the alternative schemes that were generated as the design for the park was progressively refined. These evaluative criteria (predominantly those of family use - all season use) also determined the order of facility development during the next stage of the planning task - implementation.

The final phase in the planning of Mayfair Park has been that of review. It is, in practice, an extension of the implementation process brought about by the long period of time taken to finalize the development of the park. Construction work began in 1961, and is still not officially deemed complete in 1977. During this lengthy implementation phase the planning agency has made good use of the opportunity to observe the consequences of the completed park. As a result, small adjustments have been made to the park's design during the review phase, and the works programme has been temporarily suspended.

In summary, the approach outlined in the sequence of planning events that led to the creation of Mayfair Park, was a relatively inflexible one. Planning proceeded in a linear, sequential manner, from the decision to develop the park, to the final implementation of the detailed site development plans. An emphasis on the design phase of the planning task has been indicated. This reflects the perspective that planning is for professionals, not people, an approach that has here been described as traditional.

SUMMARY

This chapter has reconstructed the planning and developmental history of Mayfair Park by an examination of documentary evidence and by interviewing some of the planners responsible for the park's design. From these sources it is ascertained that the park was intended to function as a family park, that is, a park to which all age groups would be attracted, and where family-type activities, such as picnicking, would be encouraged. Use of the park by large groups was to be discouraged as were organized or programmed activities.

Mayfair Park was also designed for winter and summer use. The key design element encouraging all-season use was the lower lake of 14 acres (5.7 hectares). In winter the lake is used for social skating and in summer for fishing and boating. It also serves an important aesthetic function, especially in summer.

The park was planned and developed as part of an integrated, hierarchical system of park spaces as outlined for Edmonton in the influential 1955 Report. It was intended to fit into this hierarchy at the city level. City level parks are described in the Edmonton Parks and Recreation Master Plan 1970-1980 (p. 30) as:

> Large landscaped open space[s], designed for a wide variety of activities; city-wide attraction and significance, each with unique character and emphasis: [located] in the river valley flats; areas which are readily accessible from major traffic arteries and freeways; by public transit or private automobile.

The process by which the park was planned reflects the planning approach of the late 1950's and early 1960's. Parks planning was then a matter for professionals. It was a creative art tempered minimally, if at all, by scientific or objective rationalizations. Hence, Mayfair Park was conceived, planned and designed by a more or less creative, artistic process, where the working drawings and site development plans evolved slowly over the course of several years. Evaluations of the plans were based on the personal experience and judgments of the Parks Department staff. Similarly, the demand for such a park was not based on surveys of city-wide recreational needs. It was assumed that a family-type/all season park was needed, and it was assumed that such a park would be well patronized. Use levels were set on the basis of experience and facilities were constructed to keep visitation rates to a maximum of 1000-2000 people at any one time.

The following two chapters describe actual use patterns in Mayfair Park as determined by interviews and observations of users of the park. In this way, planned uses can be compared and, if possible contrasted, with patterns of use generated by the completed facility.

NOTES

[1] In 1958 there were four large city-level parks in operation. They were Queen Elizabeth Park, 91.82 acres (37.17 ha); Victoria Park (including Victoria Golf Course), 264.75 acres (107.2 ha); Laurier Park, 147.21 acres (59.6 ha); and Kinsmen Park, 159.21 acres (64.46 ha). Two smaller district-level parks were being developed at this time. They were Coronation Park, 29 acres (36 ha) and Emily-Murphy Park, 49.93 acres (20.2 ha).

[2] The architects were the Edmonton firm of Bittorf-Wensley and Associates.

CHAPTER IV

THE QUESTIONNAIRE

THE QUESTIONNAIRE DESIGN AND SAMPLING PROCEDURES

The study reported on here required a comprehensive knowledge of the characteristics and activity patterns of both summer and winter users of Mayfair Park. Initially, this required a decision as to whether the questionnaires would be mailed to a representative sample of Edmonton residents, given to a sample of on-site recreationists to be completed by the respondent (self-administered), or administered in personal interviews. Mailed questionnaires were discounted because of poor response rates as reported in many studies (Bauer and Meissner, 1963; Scherer and Coughlin, 1972), and also because many of the questionnaires undoubtedly would have been posted to non-users of Mayfair Park. Non use is an important area for further research (see Gold, 1972), but it is not the focus of the present study.

Next, the advantages and disadvantages of self-administered questionnaires as against interview surveys were considered (Moser, 1958; Oppenheim, 1966; Burton and Cherry, 1970). To save money, and to increase response rates, it was decided that questionnaires would be on-site and interview-based. It was felt that this method also had the advantages of eliciting more spontaneous reactions to the questions asked, and of allowing the researcher to make face-to-face contact with the respondents and thereby gain a closer familiarity with his subject matter.

A pre-test was conducted during the period May 1 - May 3, 1976, using a semi-structured questionnaire (Smith et al., 1976) containing many open-ended questions. This preliminary questionnaire was intended to aid in the design of the final questionnaire, in particular, to discover the 'anchor' words with which users were familiar and which could then be coded into closed-ended questions. Thirty-four respondents were interviewed for the pilot and, from their responses, several modifications were made. Activity check-lists were drawn up and incorporated into the major questionnaire; the ordering of key questions was changed to improve the 'flow' or continuity of the interview; and, most notably, socio-economic questions were asked last so that if the respondent refused to answer them it did not affect that data collected prior to the refusal. Examples of the final winter and summer questionnaire are included in the Appendix.

When sampling procedures were being considered Babbie's (1973, p. 78) maxim; "A sample will be representative of the population from which it is selected, if all members of the population have an equal chance of being selected in the sample", was used as a guide.
A predetermined route of walking through the park in an anti-clockwise direction was chosen and interviews were selected at approximately one hundred yard intervals. If refused, the next nearest person was approached and so on until a successful interview was obtained. Systematic are sampling was also carried out to ensure that respondents were interviewed in all sectors of Mayfair Park. For the winter questionnaire, however, this technique was not feasible. Some park users, for example skiers and skaters, were not willing to be stopped and interviewed as they would quickly become cold. This difficulty was overcome partly by tailing selected respondents and interviewing them either in the warmth

of the pavilion, or in their cars in one of the parking lots. The chief disadvantage of this method of selecting respondents was that it was time consuming.

The total sample size was 254 completed questionnaires, of which 252 were usable; 150 respondents were interviewed for the summer questionnaire and 102 were interviewed during the winter. Summer interviews took place from July 31 to August 12, 1976. Winter users were interviewed between January 16 and January 23, 1977. Seven (7) recreationists refused to be interviewed. Mos of these refusals were from winter visitors who were concerned about effects of the cold. Each interview averaged about 20 minutes, and a maximum of 20 interviews was administered in any one day.

Data Base

Data were collected on the following general topics:

1) The characteristics of the respondents. Profile data included the age, sex and occupation of the respondent, the type of residence lived in, the respondent's stage in the family life cycle, and the nature and size of the social group (if any) that accompanied the respondent to the park.

2) The accessibility of the park to the respondent. Accessibility was measured by determining the location of the respondent's residence, the method used to travel to the park, and the time taken for this journey from the home. Recreationists' opinions of the public transit service to Mayfair Park were also recorded.

3) Participation rates in recreational activities of various types - frequencies of visits to the park, the timing of those park visits,

the length of stay, as well as all forms of recreational pursuits, were determined. These variables were designed to be correlated with information on the characteristics of the park's users. These correlations would indicate the activity preferences and patterns of various types of park users.

4) The reasons respondents advanced for visiting Mayfair Park. Likes and dislikes were recorded in open-ended questions and respondents were asked what factors influenced their decision to visit the park on the day of the interview.

5) Respondents' opinions of the facilities and recreational opportunities available within Mayfair Park. Closed-ended, coded questions were utilized to measure opinions of existing facilities while questions relating to the desire for additional facilities or opportunities, if any, were asked in an open-ended manner.

6) The reactions of the respondents to the various design elements within the park. These were measured in pre-coded questions which dealt with the size and appearance of the park, the landscaping, the vegetation, the architecture and other specific features of the design. Respondents' perceptions of problems such as noise, crowding, litter and other related managerial problems such as vandalism were assessed, also in closed-ended questions.

7) Attitudes towards other, similar parks in Edmonton. Respondents were asked their opinions about alternative recreational opportunities available in other parks in Edmonton, and also how often they visited these parks. In addition, they were asked to compare Mayfair Park with the other river valley parks in Edmonton.

ANALYSIS OF THE DATA

The answers to both the summer and winter questionnaires were first coded, then punched on IBM computer cards and processed by computer. After obtaining simple frequency distributions of each of the variables, a number of non-parametric statistical procedures were utilized to analyse the responses. Wall (1972, p. 47) has observed that such tests are applicable when many of the data collected are at an ordinal scale (only 7 of the survey variables were suitable for coding on an interval scale). Non-parametric tests were also chosen as they are suitable for analysing small samples. Contingency tables (cross-tabulations) were derived and chi-square analyses determined whether the variables were statistically independent. Correlations were then computed to tests sets of relationships among two or more variables. The significance level (p) decided upon for the chi-square and correlation tests was 0.05.

Data collected from summer and winter questionnaires were analysed separately. This was necessary because the two questionnaires were not identical in design as the winter interviews were deliberately kept shorter than the summer interviews. Some problems in analysis were encountered as a result, chiefly because of the smaller winter sample.

The contingency tables for winter data often had small expected frequencies in each cell, which created a major constraint to the applicability of chi-square analysis. Mitchell (1973), citing Siegel (1956), has asserted that if a contingency table has more than 1 degree of freedom, then the chi-square test should be used only if not more than 20 percent of the cells have expected frequencies smaller than 5, and if no cell has an expected frequency of less than 1. In addition, if the degree of freedom equal 1, then each cell in the contingency table should have an expected frequency greater than 5 (Mitchell, 1973, Hammond and McCullogh, 1974, p. 144). When these requirements could not be satisfied with the winter data, response categories had to be combined, or the frequencies obtained in the contingency table cells had to be aggregated.

PARK USER CHARACTERISTICS

A breakdown of the respondents by sex and by age is given in Table 3.

Summer and winter users of Mayfair Park were evenly distributed as to sex but tended to be concentrated in the age range of 20 to 30. Middle aged groups (31-50) were well represented in both sample populations whereas the young and the elderly were underrepresented.

Age is obviously an important variable affecting recreation behaviour. A general trend of lessening participation with increasing age is reported in many studies (Sessoms, 1963, p. 113; Ranken and Sinden, 1971, p. 424; Lindsay and Ogle, 1972, p. 23), and age affects also the types of pursuits in which one engages. Increasing age usually confines the recreationist to a narrower range of recreation interests (Sessoms, 1962, p. 114). Clawson (1971, p. 584) points out

TABLE 3

SEX, AGE OF RESPONDENT

SEX	SUMMER RESPONDENTS		WINTER RESPONDENTS	
	Number	Percent	Number	Percent
Male	76	51.0	46	50.5
Female	73	49.0	45	49.5
TOTAL	149	100.0	91	100.0

$X^2=0.004$, DF=1, $p>.05$

AGE	Number	Percent	Number	Percent
13-19	23	15.8	8	8.2
20-30	71	48.6	50	51.5
31-50	39	26.7	38	39.2
51-79	13	8.9	1	1.0
TOTAL	146	100.0	97	99.9

$X^2=11.89$, DF=3, $p<.01$

Source: Mayfair Park Questionnaires 1976-77.

that people over 65 indulge in half the total recreational activity of people aged 18-24. These research findings are supported by the data on users of Mayfair Park.

TYPE AND SIZE OF PARK USER GROUPS

Each respondent was asked if he/she had come to the park alone, with friends, with family, or with another social group. Park visitors were also asked for the number of people in the group. Table 4 summarizes the type and size of the social groups present in the park.

For both summer and winter respondents the modal number in each group interviewed was 2. Winter groups, however, tended to be significantly larger. This could be accounted for, in part, by the inclusion of two very large skating parties of 20 and 30 persons respectively in the winter sample. Correcting for these two large winter groups results in a mean winter group size of 3.6, still somewhat larger than the mean summer group size of 2.9. Moreover, 21.3 percent of the summer respondents were alone when interviewed compared with 5 percent for the winter sample. In terms of group size distribution 73 percent of the winter users were groups with 4 or fewer individuals in them, whereas 84 percent of summer users were in groups of 4 or less. Less than 10 percent of groups in both samples consisted of more than 5 individuals.

Group composition varied considerably between summer and winter users. Family groups comprised 39 percent of the summer sample and 61 percent of the winter sample. Percentages for groups of friends and for groups classified as 'other' showed less variation.

TABLE 4

AVERAGE TYPE AND SIZE OF GROUP VISITING
MAYFAIR PARK AS REPORTED BY RESPONDENTS

SIZE OF GROUP	SUMMER N.	 %	WINTER N.	 %
1	32	22.5	5	4.9
2	40	28.2	25	24.5
3	17	12.0	22	21.6
4	28	19.7	23	22.5
5	10	7.0	11	10.8
6	8	5.6	8	7.8
7	1	0.7	3	2.9
8	2	1.4	–	–
9	1	0.7	3	2.9
10 or more	3	2.1	2	2.0
TOTAL	142	99.9	102	100.0
Alone	32	21.3	5	4.9
Friends	46	30.7	28	27.5
Family	59	39.3	62	60.8
Other Group	13	8.7	7	6.9
TOTAL	150	100.0	102	100.1

X^2=17.5, DF=3, $p < .01$

Source: Mayfair Park Questionnaires 1976-77

(Mean group size Summer = 2.9 Winter = 4.09)

In summary, recreationists in Mayfair Park characteristically belong to small social groups based on family or friendship ties, with winter groups being slightly larger than summer groups, and family use being more significant in the winter months. In their study of non-organized social groups in local parks Cheek and Burch (1976, pp. 161-163) noted that the local park was predominantly used by small groups (the mean group size in their study was 4.3) based on ties of kin, while in another setting, Wagar (1967, p. 401) found that family group use comprised 50.2 percent of all visitors to common land in selected parts of England. Mercer (1971a, p. 506) has reported similar findings from Australia.

Sexual Composition of Groups

The sexual composition of groups interviewed in Mayfair Park was characteristically mixed. A crosstabulation of the type of group with the sex of the respondent revealed that females were less likely to go to the park alone and were more likely to visit the park in larger groups of 5 or more than were males (see Table 5).

For the summer sample, of the 32 respondents who were alone in Mayfair Park 24 (75%) were male, while females outnumbered males consistently in both small groups and larger groups. In summary, 89 percent of the females interviewed in the summer sample had visited Mayfair Park with company, whereas 68.4 percent of males interviewed were in groups of various sizes (X^2=8.2, p=0.01 with 1 degree of freedom). A similar pattern emerges with the winter sample. Males were more likely to visit Mayfair Park alone, and were also less likely to have visited the park in larger groups of 5 or more, than females.

TABLE 5

SEXUAL COMPOSITION OF GROUPS OF DIFFERING SIZES IN MAYFAIR PARK

	NUMBER IN GROUP							
	Alone		2-4 persons		5 or more persons		ROW TOTAL	ROW PERCENT
SEX OF RESPONDENT	N.	%	N.	%	N.	%		
SUMMER								
Males	24	17.1	41	29.3	9	6.4	74	52.9
Females	8	5.7	44	31.4	14	10.0	66	47.1
TOTAL	32	22.8	85	60.7	23	16.4	140	100.0
WINTER								
Males	5	5.7	29	33.0	11	12.5	45	51.1
Females	-	-	28	31.8	15	17.0	43	48.9
TOTAL	5	5.7	57	64.8	26	29.5	88	100.0

X^2 (summer) = 8.76, $p < 0.01$ with 2 degrees of freedom.
X^2 (winter) = 10.98, $p < 0.01$ with 2 degrees of freedom.

Source: Mayfair Park Questionnaires 1976-77.

OCCUPATION

The two largest occupation groups among both summer and winter respondents were classified as white collar and blue collar. Students and housewives formed a second grouping, professional and managerial occupations were well represented, whereas those classified as retired and unemployed made up a small percentage of respondents.

TABLE 6

OCCUPATIONS OF MAYFAIR PARK RESPONDENTS

OCCUPATION	SUMMER N.	SUMMER %	WINTER N.	WINTER %
Professional Managerial	21	14.0	13	12.7
White collar	35	23.3	37	36.3
Blue collar	34	22.6	23	22.5
Housewives	25	16.7	14	13.7
Students	23	15.3	8	7.8
Retired	6	4.0	1	1.0
Unemployed	5	3.3	-	-
No Response	1	0.7	6	5.9
TOTAL	150	100.0	102	100.0

Source: Mayfair Park Questionnaires 1976-77.

WORKING HOURS

An individual's participation in various outdoor recreational activities is a function, in part, of the amount and timing of his/her leisure time. Recent studies have tested the effects of the introduction of the 4 day work week on established recreation patterns and preferences (eg. Godbey and Parker, 1976, pp. 29-41). It was felt therefore that information on the respondents' working hours, when correlated with data on activity preferences, would yield information useful to planners. Working hours were coded as 'days' if the respondent worked regular office hours; 'shifts' if the respondent was a shift worker; and 'irregular' if the respondent was self-employed or worked unusual hours. Housewives, for example, would fall into this last category (see Table 7).

TABLE 7

WORKING HOURS OF VISITORS TO MAYFAIR PARK

WORKING HOURS	SUMMER		WINTER	
	N.	%	N.	%
Days	56	37.3	63	61.8
Shifts	11	7.3	3	2.9
Irregular	24	16.0	19	18.6
No Response	59	39.3	17	16.7
TOTAL	150	99.9	102	100.0

Source: Mayfair Park Questionnaires 1976-77.

FAMILIES WITH SMALL CHILDREN

Data collected for this variable were based on whether the respondent was the parent of dependent children. Hecock (1970, p. 245), Ranken and Sinden (1971, p. 425) Masser (1966, p. 46) and Lindsay and Ogle (1972, p. 25) have tested for the effect of the presence of children in the home on the preferences of individuals for differing recreational activities and sites. The evidence as presented in these studies is, as yet, inconclusive. Ranken and Sinden (1971) for example, found that the average age of children in a household was a significant variable ($p. < 0.05$) affecting a household's recreational patterns. Lindsay and Ogle (1972) however, noted that the number of children in a household did not explain significantly the propensity of a household to use the nearby Pineview Reservoir in Utah. In the recreational setting of an urban park it was felt that families with children would differ in their recreational behaviour from other users of the facility. Data collected for this variable would also make it possible to check the extent of use of the park by family groups. No respondents were interviewed from households where there were more than 5 children. Of those respondents with children, 2 was the model number of dependents (Table 8).

TABLE 8

NUMBER OF CHILDREN OF USERS OF MAYFAIR PARK

NUMBER OF CHILDREN AT HOME	SUMMER N.	SUMMER %	WINTER N.	WINTER %
None	99	66.0	46	45.1
1	11	7.3	19	18.6
2	25	16.7	22	21.6
3	12	8.0	10	9.8
4	3	2.0	3	2.9
5	-	-	2	2.0
TOTAL	150	100.0	102	100.0

Source: Mayfair Park Questionnaires 1976-77.

TYPE OF DWELLING UNIT

To ascertain whether residents in apartments differed from home dwellers in their orientation towards lesiure activities and in their use of Mayfair Park, data on type of dwelling unit were collected. Table 9 summarizes the data collected. Respondents from single family detached houses comprised 49.3 percent of the sample while interviewees from medium to high density apartments made up the remainder. Significantly, respondents from walk up apartments made up 18 percent of the summer and 19.6 percent of the winter sample. Single family dwelling units accounted for 49.0 percent and 50.5 percent of the summer and winter samples respectively, while high rise apartments were lived in by 9.3 percent of the winter and 10.7 percent of the summer interviewees. A comparison of these findings with data from the 1971 Edmonton General Plan on dwelling unit types in Edmonton is presented in Table 9.

TABLE 9

A COMPARISON BETWEEN TYPES OF DWELLING UNITS FOR USERS OF MAYFAIR PARK, AND FOR RESIDENTS OF EDMONTON

TYPE OF DWELLING UNIT	MAYFAIR PARK USERS				CITY RESIDENTS*	
	SUMMER		WINTER			
	N.	%	N.	%	N.	%
Single family Detached	73	49.0	49	50.5	74,250	57.3
Walk up	27	18.1	19	19.6	30,950	17.2
High rise	16	10.7	9	9.3	8.600	5.0
Row	25	16.8	15	15.5	6,050	4.1
Duplex	5	3.4	3	3.1	17,400**	14.1
Other***	3	2.0	2	2.1	2,500	2.3
TOTAL	149	100.0	97	100.1	139,750	100.0

* Percentages for housing types for the City of Edmonton are based on the average of 1961 census data and estimated percentages of housing types in 1981, as published in the 1971 Edmonton General Plan, P.5.1.

** Includes duplexes, basement suites, and other converted two-family dwellings.

*** Includes trailers, mobile homes, motor homes, etc.

$X^2=105.40$, DF=5, $p < 0.01$

Source: Mayfair Park Questionnaires, 1976-77, Edmonton General Plan 1971, p.5.1.

A comparison of housing types for the City of Edmonton and for users of Mayfair Park shows that residents of single family detached houses and duplexes are underrepresented in both winter and summer samples, while residents of medium to high density dwelling unit types were represented in greater numbers, in all cases, than the city average for those dwelling unit types.

Hendricks (1971) examined the effects of inter-urban residence differences on recreational behaviour and noted that differences existed in the type and level of participation in urban and outdoor lesiure activities. In particular, apartment dwellers had the highest average level of participation in most forms of recreation available in urban areas (Hendricks 1971, p. 418). The data from Mayfair Park users lend support to Hendricks' findings. If apartment and medium density housing continues to increase at current rates, and if more of Edmonton's residents are to be living in these types of dwelling units, then it must be expected that greater demands will be placed on city parkland and other urban lesiure locales.

ACCESSIBILITY

Many studies point to the importance of spatial accessibility in evaluating the available recreational facilities in any community. Cosgrove and Jackson, (1972, pp. 23-25) have noted that of eight major factors influencing recreational participation rates in the U.S., the two most important were the locations of population and recreation areas, and the access linkages between them. Lindsay and Ogle (1972, pp. 23-24) have argued that differing socio economic groups have nearly equal preferences for public outdoor recreation but that, because of external factors such as opportunities, the most affluent groups are more able to exercise their preferences. Their suggestion is to provide inexpensive access to recreation facilities close to urban areas for all socio-economic groups.

While accessibility is mainly a function of distance it also includes the many and varied obstacles a potential user faces in reaching a recreation site. Rugg (1974, pp. 113-122), in his examination of local parks in Ottawa-Hull, noted that a more accessible park is one where such varied obstacles are minimized. For this thesis, accessibility means chiefly the physical accessibility of Mayfair Park to the City population of Edmonton.

LOCATIONS OF RESPONDENT HOME ADDRESSES

Mayfair Park is situated on river valley land, close to the University of Alberta and to the downtown city core of Edmonton, Alberta. In general terms, it would appear that the park is universally accessible to all Edmontonians. The following map of home addresses of respondents interviewed in Mayfair Park reveals that they travelled to the park from nearly all parts of the city. Only in the inner city apartment sections of Jasper Avenue, between 109th and 124th streets, was there noted a heavy concentration of Mayfair Park users. The extreme northeastern and southeastern parts of the city were underrepresented in the sample. These data suggest that Mayfair Park provides inner city apartment dwellers with an important recreational facility. See Figure 11 below.

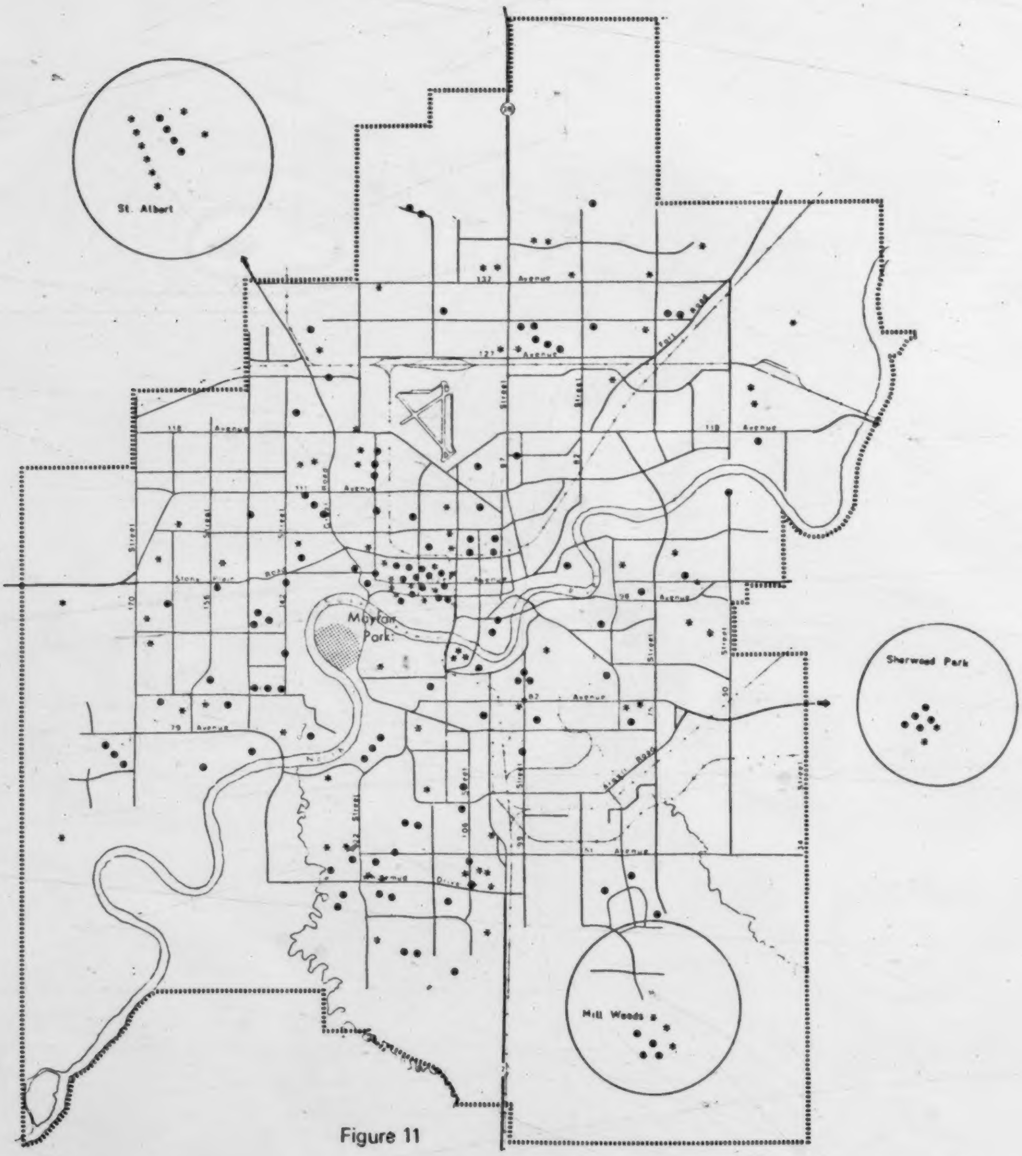

St. Albert
Sherwood Park
Mill Woods
Mayfair Park
137 Avenue
127 Avenue
118 Avenue
111 Avenue
Stony Plain Road
87 Avenue
79 Avenue
51 Avenue
170 Street
156 Street
142 Street
122 Street
106 Street
99 Street
97 Street
82 Street
Fort Road
Argyll Road
Scale
km
1
N
Summer Sample ●
Winter Sample •

Figure 11

Locations of Respondent Home Addresses

MODE OF TRANSPORT TO MAYFAIR PARK

Figure 11 reveals that, in general terms, users of Mayfair Park come from most areas of the city of Edmonton. However, data from the user questionnaires suggest that certain city residents, those who do not own cars, find Mayfair Park very difficult to reach. Ninety-five percent of the winter and 91 percent of the summer interviewees travelled to the park by car. Only 4 users (2.4 percent) in the summer sample, and 2 users (1.9 percent) in the winter sample travelled to the park by bus. When asked for an opinion of the adequacy of the public transit system to Mayfair Park, 8 percent and 5.9 percent of the summer and winter users respectively, thought the service adequate, 13 percent and 24.5 percent thought the service inadequate, and 79 percent of summer users and 69.6 percent of winter users did not know whether the service was adequate or not. Such a large percentage of 'don't know' responses can be interpreted it seems, in either of two ways. Either Cosgrove and Jackson's (1972, p. 23) suggestion that public transport is little used for recreational travel today is applicable, or, the large number of 'dont know' responses, combined with the significant number of 'inadequate' responses, reveal that visitors to Mayfair Park believe that public transport to the Park is generally poor.

These findings compare with the 1971 City of Edmonton Park User Survey where 86.4 percent travelled to large city parks by auto, 2.8 percent travelled by bus, 2.7 percent by bicycle, and 7.4 percent of the sample walked. The percentage of visitors who travelled by car is somewhat higher for Mayfair Park.

Proudfoot (1965, p. 22), in his survey of the recreational use of the North Saskatchewan River Valley, determined that cars were the main medium of transport to the major river valley parks in Edmonton. Surprisingly, however, only 68 percent of Proudfoot's sample travelled by car and 25 percent walked. He explained this by citing local use as important where a major park had a children's playground attached to it.

One cautionary note must be added here. Studies in Britain have often shown that car owners are more recreationally active in all pursuits than non-owners (Masser, 1966, p. 51; Law, 1967, p. 383; Cosgrove and Jackson, 1972, p. 25). It may be that this active, car-owning, recreating public comprise the majority of urban park users in Edmonton, and that those without cars seek out alternative recreational settings. On the other hand, it is doubtful that these British findings are directly applicable to the Canadian scene, due to higher levels of car ownership among the Canadian population.

In summary, the data from Mayfair Park suggest that non-car-owners are poorly represented among the sample population, and that the public transit service to the park needs to be improved if the park is to be accessible to those elements of society, particularly the elderly, who were underrepresented in the park user survey.

TRAVEL TIME

The friction of distance, or distance disutility, has often been referred to in the recreational literature as explaining, at least in part, the relative attractions of various recreation sites. Distance has been used as a measure to delineate the catchment areas of various sites through on-site surveys for large parklands (Burton, 1966), for small local parks (Dee and Liebman, 1970; Bangs and Mahler, 1970), and for parks of varying sizes (Houghton-Evans and Miles, 1970; Patmore, 1973). Regression analyses have shown that attendance at a site will decrease with increasing distance (Clawson and Knetsch, 1966, pp. 70-71; Mercer, 1972, pp. 123-129; Cheung, 1972, pp. 149-152). This relationship between attendance and distance does not hold, however, in every instance. For example, Colenutt (1969, p. 44), Hecock (1970, p. 242), and Wall (1972, pp. 50-51) have noted that recreational day trippers do not always aim to minimize the distance travelled between the origin and destination of a journey; rather, the car is used to increase the variety and flexibility of the journey. Others have pointed out that distance, especially in an urban setting, is less critical for visitation rates than the time taken for a particular journey (Coppock and Duffield, 1975, pp. 16-23). Travel time is therefore used here as a measure of the 'pull' or attractivity of Mayfair Park in Edmonton. Moreover, travelling time represents the respondents' perceptual measures of the distance between home and the park. In the study it was impossible to check how accurately perceived travelling time reflected actual travelling time.

The modal travel time for both summer and winter respondents was 15.0 minutes (Table 10). Winter visitors on average travelled for slightly more time to reach Mayfair Park; (mean time; winter = 20.1 minutes; summer = 17.6 minutes). In addition, local use was slightly more pronounced in summer than in winter. Twelve percent of the summer sample took 5 minutes or less to reach the park compared with 4.9 percent of the winter sample. Significantly more

TABLE 10

TIME TAKEN TO TRAVEL FROM PLACE OF RESIDENCE TO MAYFAIR PARK, AS REPORTED BY MAYFAIR PARK USERS

TIME TAKEN	SUMMER		WINTER			
	N.	%	N.	%	ROW N.	%
1-10 mins.	56	37.3	21	20.6	77	30.6
11-25 mins	65	43.3	58	56.9	123	48.8
more than 25 mins	29	19.4	23	22.5	52	20.6
TOTAL	150	100.0	102	100.0	252	100.0

Source: Mayfair Park Questionnaires 1976-77.

Means travel time summer = 17.6 minutes, winter 20.1 minutes
$X^2=10.99$, DF=4, $p < .05$

of the winter sample (56.9 percent) fell into the middle range category of travelling time, that is from 11 to 25 minutes, than the summer sample (43.3 percent). The majority of park visitors travelled for 25 minutes or less (summer, 81 percent; winter, 77 percent). Balmer (1973), cited in Patmore (1973, p. 234), aggregated data from 41 of the 96 urban parks in Liverpool, England, and found the dominant pattern was one of short distance movement, for parks of all types and sizes. Indeed, 80 percent of all park users in his study travelled less than three-quarters of a mile.

The data from Mayfair Park suggest that local use is an important part of the catchment area of the park, especially for summer users. Most of the park users, however, travel to the park from locales somewhat more distant, yet still within the city of Edmonton. A small percentage of summer (6 percent) and winter (8.8 percent) users travelled from the satellite communities of St. Albert and Sherwood Park while 9.3 percent of the summer and 0.9 percent of the winter interviewees travelled from origins outside the city limits. This seems to indicate that travelling time should, on the average, have been greater than those reported, especially for the more mobile summer visitors. It may be that an on-site interview, administered after the travel to the site, generates a perceived travelling time response that is less than the actual measure of the time taken.

TRAVELLING TIME AND FREQUENCY OF VISITATION

Travelling time was closely related to frequency of visitation to Mayfair Park. As expected, travel time was negatively associated with frequency of Park visits. Table 11 illustrates the results of a chi-square analysis on these two variables.

TABLE 11

FREQUENCY OF PARK VISITS AS EXPLAINED BY TRAVELLING TIME TO MAYFAIR PARK

FREQUENCY OF VISITATION	TRAVELLING TIME IN MINUTES											
	SUMMER						WINTER					
	1-10		11-25		26-90		1-10		11-25		26-90	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
> 2/wks.	18	32.1	12	18.5	3	10.3	3	14.3	3	5.2	2	8.7
1/w-2/w	18	32.1	19	29.2	5	17.2	8	37.1	19	32.8	3	13.0
<1/w- 1/mth	18	14.3	16	24.6	9	31.0	8	38.1	21	36.2	5	21.7
<1/mth	12	21.4	18	27.7	12	41.4	2	9.5	15	25.9	13	56.5
TOTAL	56	99.9	65	100.0	29	99.9	21	100.0	58	100.1	23	99.9

$X^2=11.9$, DF=6, $p < 0.05$ $X^2=14.5$, DF=6, $p < 0.05$

Source: Mayfair Park Questionnaires 1976-77.

The chi-square analysis shows the relationship between travel time and frequency of visitation to be somewhat stronger for winter users. The relationship was not found to be significant at the 0.05 level for summer users.

To test the strength of the relationship between the dependent variable, frequency of visits, and the independent variable, travelling time, a regression analysis was performed. Data for frequency of visitation were collected in two forms, ordinal and interval. The interval scale was derived by computing a probability index ranging from 1 to 100 from the answers to the question "how often do you visit Mayfair Park?" Respondents who answered "daily" to this question were assigned a probability index of 100, indicating a 100 percent chance that the respondent would visit the park on any given day. Responses were recorded from interviewees who visited the park as infrequently as once every two years. These were assigned an index of 1. Answers could then be graded simply, forming a variable termed "probability", with values ranging from 1 to 100.

For winter users, the longer the travelling time from Mayfair Park, the less likely were the respondent's chances of visiting the park on a given day ($r = -0.19$, $p < 0.05$). The same relationship was observed for summer park users ($r = -0.22$, $p < 0.01$). However, unlike the chi-square analysis, the regression test showed that this relationship was stronger for summer park users. This apparent contradiction can best be explained by the insensitivity of the chi-square test when a large number of diverse responses must be coded into a very few response categories.

Travelling Time and Relationship With Selected Variables

Relationships were observed between travelling time and a number of other variables. The length of stay of interviewees varied significantly with variations in travelling time; in general, the longer the journey to the park the longer the length of the visit (winter users; $r = 0.18$, $p < 0.05$: summer users; $r = 0.22$, $p < 0.01$). Leonard (1974, pp. 29-31) also noted that the average length of stay of visitors to Rickmansworth aquadrome in Dartington, England increased with the time taken to reach the facility.

Age was not a strong explanatory variable influencing the travelling tomes of visitors, although a weak negative relationship was observed for both summer ($r= -0.15$, $p = 0.08$) and winter ($r = -0.04$, $p = 0.08$) visitors. Respondents with dependent children at home were more likely to travel for longer periods to visit Mayfair Park than were respondents without children (summer users, $r = 0.13$, $p < 0.05$; winter users, $r = 0.17$, $p < 0.05$). However, family groups were not observed to travel for longer time periods than non-family groups, and the size of the group was not observed to be related to travelling time by the regression analysis (summer users $r = 0.10$, $p > 0.05$; winter users, $r = -0.01$, $p > 0.05$).

USE PATTERNS AND ACTIVITIES IN MAYFAIR PARK

THE TIMING OF VISITS

Visitors to Mayfair Park were asked at what time of the week did they normally visit the park. Some marked differences were recognized between the timing of summer and winter visits. Whereas

32.7 percent of the summer sample stated that they used the park on weekdays only, 2.0 percent of the winter sample gave this answer. In contrast 65.7 percent of the winter users visited the park on weekends only, as compared with 28.0 percent of summer users. Thirty-seven percent of summer users and 32.4 percent of winter users visited the park both on weekdays and on weekends. Thus, weekends use is far more pronounced in winter than in summer.

Respondents were next asked at what time of day did they most often come to Mayfair Park. The results are summarized in Table 12.

TABLE 12

TIMING OF RESPONDENT VISITS TO MAYFAIR PARK

TIME OF DAY	SUMMER N.	SUMMER %	WINTER N.	WINTER %
Early morning	8	5.3	4	3.9
Morning	24	16.0	20	19.6
Lunchtime	45	30.0	24	23.5
Afternoon	87	58.0	59	57.8
Evening	35	23.3	26	25.5
TOTAL	199	-	133	130.3

$X^2=1.72$, DF=4, $p > .05$

Source: Mayfair Park Questionnaires 1976-77.

Most visitors came to the park in one time period only (summer users 72.9 percent, winter users 77.5 percent). Twenty-one percent of the summer and 15.7 percent of the winter sample visited for two time periods, but very few respondents reported that they came to the park for more than two time periods (summer users 5.4 percent, winter users 6.9 percent). Responses to these two questions seem to indicate that visitors to Mayfair Park are relatively inflexible in their recreational behaviour and that summer and winter timing is also comparable. The dominant pattern suggested by the data is that users of the park are regular in their visiting habits, and that the length of stay of the average visit is characteristically short.

A majority of visits are made in the afternoon, though lunchtime and evening visits are also popular, each accounting for approximately half the number of afternoon visits. The City of Edmonton Parks User Survey (1971) cited afternoon visits to major city parks as comprising 62.8 percent of total visits to large parks in Edmonton. Late morning and evening visits accounted for 6.4 and 12.4 percent respectively; considerably less than the corresponding figures of 30 percent and 23.3 percent (summer) and 23.5 percent and 25.5 percent (winter) for Mayfair Park visits. Evening use is particularly important in both summer and winter for Mayfair Park.

Comparable findings are described in several other studies. Winterbottom (1967, p. 147) studied use patterns at Shrub End Park in Colchester, England, and found that peak usage occurred on weekends between the hours of 2 p.m. and 5 p.m.. Burton (1966, p. 379) at Box Hill, Wager (1967, p. 400) for common land in England, and Mercer (1971, p. 504) at Ferntree Gully in Australia have described similar use patterns for parks in varying cultural settings. Coppock and Duffield (1975, pp. 20-21) have synthesized findings from several

English studies that confirm the Mayfair pattern of peak usage in the afternoons, and at weekends.

THE LENGTH OF STAY

Respondents were asked how long they intended to stay in Mayfair Park on the day of the interview. Table 13 summarizes the answers to this question.

TABLE 13

LENGTH OF STAY OF RESPONDENTS IN MAYFAIR PARK

CODE	SUMMER USERS		WINTER USERS	
	Number	Percent	Number	Percent
Less than 1 hr.	8	5.3	-	-
1-2 hrs.	36	24.0	13	12.7
2-3 hrs.	36	24.0	48	47.0
3-4 hrs.	25	16.7	35	34.3
4-5 hrs.	35	23.3	5	4.9
more than 5 hrs.	10	6.7	1	1.0
TOTAL	150	100.0	102	100.0

$X^2=42.1$, $Df=6$, $p<.01$

Source: Mayfair Park Questionnaires 1976-77.

The average intended length of stay was 2.8 hours for summer users and 2.5 hours for winter users. Proudfoot (1965, p. 24) found that the average length of stay of visitors to major parks in Edmonton was 2.4 hours. His findings are consistent with the data from Mayfair Park. Leonard (1974, p. 29) in a study conducted at Dartington, England, has noted that people are often poor estimators of the length of time they will stay at a given recreational site. For this reason, Leonard argues that length of stay data should often be regarded with caution. With this warning in mind, this section reports on the verbal responses of visitors to Mayfair Park.

The modal answer for both summer and winter respondents was 2.0 hours. Summer visitors tended to stay in the park longer than winter visitors, and a greater percentage of summer visitors travelled to the park for a short visit of less than one hour.

Respondents who visited the park at different times of the day showed variations in the length of their visits. Early morning visitors characteristically stayed less than one hour in the park (winter $x^2 = 27.5$, DF = 2, $p < .01$; summer $x^2 = 0.7$, $p > .05$) as did morning visitors (winter $x^2 = 5.7$, DF = 2, $p < .05$; summer $x^2 = 1.7$, DF = 2, $p > .05$). Lunch time visits were also of short duration. Seventy percent of winter and 47 percent of summer respondents stayed less than one hour at this time of day (winter $x^2 = 7.7$, DF = 2, $p < .05$; summer $x^2 = 0.7$, $p > .05$). Afternoon and evening visits usually involved a longer stay in the park. No significant relationship existed between the timing and the length of the daily visit for afternoon and evening visitors, although evening visitors tended to favour the two shortest length of stay categories.

Simple (two variable) regression was performed on the length of stay data and several other variables including age, travelling time, the size of the respondent's group, the number of dependent children, and the frequency with which the respondent visited Mayfair Park. Pearson's product-moment correlation coefficients (Pearson's r) and its associated test of significance, were derived in order to describe the degree of association between the two sets of paired variables (Hammond and McCullagh, 1974, pp. 192-207). Both the dependent variable (length of stay) and the independent variables were treated as continuous, interval scale variables, and not as classification variables as in the chi-square tests. (See Christensen and Yoesting, 1973, p. 10, for a similar treatment.)

Results of the regression indicated that age was a significant variable explaining variation in the length of stay. Young people showed a tendency to stay longer in the park than older visitors (summer users, $r = -0.20$, $p < 0.01$), however, the winter sample revealed a much weaker relationship ($r = 0.05$) that was not significant at the 0.05 level. Length of stay also varied with travelling time (summer users, $r = 0.22$, $p < 0.01$; winter users, $r = 0.18$, $p < 0.05$). In general, the longer the journey to the park, the longer the visit. No significant relationship was found between the size of a group and the length of stay in the park, but respondents with one or more children showed a tendency to stay for shorter periods than respondents without children (summer users, $r = -0.14$, $p < 0.05$; winter users $r = -0.14$, $p = 0.06$). Frequency of use was, unexpectedly, not related to the length of stay as reported by the respondents. Table 14 presents in summary form the results of the regression analyses.

TABLE 14

SIMPLE REGRESSION SHOWING THE RELATIONSHIP BETWEEN THE LENGTH OF STAY AT MAYFAIR PARK AND SELECTED INDEPENDENT VARIABLES

INDEPENDENT VARIABLE	PEARSON'S r		SIGNIFICANCE LEVEL	
	Summer	Winter	Summer	Winter
Age	-0.20	0.06	< .01	> .05
No. of Children 1-5	-0.13	-0.11	< .05	> .05
Size of Group	0.01	0.08	< .05	> .05
Frequency of Visitation expressed as a probability 1-100 percent	-0.02	-0.02	> .05	> .05
Travelling Time 3-90 minutes	0.22	0.18	< .05	< .05

Total Sample Size = 252

Source: Mayfair Park Questionnaires 1976-77.

FREQUENCY OF VISITATION

Question 6 asked respondents to indicate how often they visited Mayfair Park. Answers to this question were coded into 4 classes: those who visited the park more than 2 times a week; between one and two times a week; between one visit a week and one visit each month; less than one visit a month. Table 15 shows the distribution for summer and winter users.

Summer users were slightly more frequent visitors than winter users. Most winter users visited the park between once a week and once a month, while the model category for summer users was between one and two visits each week. In addition, 11 percent of the summer visitors were "hard core" users, visiting the park 4 or more times each week, whereas only 3 percent of the winter sample reported

TABLE 15

FREQUENCY OF VISITS AS REPORTED BY MAYFAIR PARK RESPONDENTS

FREQUENCY	SUMMER USERS		WINTER USERS	
	N.	% %	N.	%
More than 2/wk.	33	22.0	8	7.8
1/wk.-2/wk.	42	28.0	30	29.4
1/wk.-1/mth.	33	22.0	34	33.3
less than 1/mth.	42	28.0	30	29.4
TOTAL	150	100.0	102	100.0

$X^2=10.6$, DF=4, $p < .05$

Source: Mayfair Park Questionnaires 1976-77.

this degree of use. These findings are in line with those reported by the City of Edmonton, Park User Survey administered during the summer of 1971, where 10.17 percent of visitors to major city parks visited at a rate of more than twice a week. Mayfair Park appears, however, to sustain heavier use than the 1971 survey reported. Twenty-two percent of summer Mayfair respondents stated they visited the park more than twice each week, the most intensive use category as coded in the 1971 city survey. Proudfoot (1965, p. 24) obtained results for Edmonton indicating similar levels of use for major city parks.

Frequency of Visits and Sex of Respondent

Males and Females visited Mayfair Park with differing rates of frequency, with males tending to be the more intensive users. Seventeen percent of the males interviewed for the summer survey indicated they came to the park three or more times each week, compared with 5.5 percent for females in the same use category ($x^2 = 7.9$, $p < 0.05$ with 3 degrees of freedom). In the winter sample this relationship was less clearly defined. Males tended to be more frequent users of the park as 10.9 percent in the most intensive use category were men whereas 4.4.percent were women, but the chi-square value of 3.08 was not significant at the 0.05 level.

Frequency of Visits and Age of Respondent

Chi-square analysis of age with frequency of visits to Mayfair Park revealed no discernible tendency towards differential use. This somewhat surprising result runs counter to research results produced by other studies that show age negatively associated with participation in outdoor recreation (Sessoms, 1963, p. 113; Burch, 1969, p. 132; Ranken and Sinden, 1971, p. 425; Lindsay and Ogle, 1972, p. 25). Simple regression against these two variables indicated a weak tendency for use levels to decrease with increasing age (summer users, $r = -0.04$; winter users, $r = -0.08$), but the p values for the regression were not significant at the 0.05 level. Rugg (1974, p. 99) has argued that different parks have the ability to attract different age groups of users. He found in his study of local parks in Ottawa-Hull that the very young and the elderly were frequent patrons of some parks while avoiding others. Mayfair Park, in general, attracts users from all age groups, yet it is impossible to estimate the intensity of use by persons under 14 years, as they were not included in the sample.

Frequency of Visits and Type of Group

Groups in Mayfair Park were coded into one of four categories: respondents who were at the park alone; with friends; with family; or with some "other" group. A chi-square test revealed that groups consisting of friends, family or "others" were evenly distributed in all levels of use categories but that respondents who were alone were more likely to be very frequent visitors, and that family groups used the park least of all of the groups. The relationship between type of group and frequency of use was slight as p values for summer or winter respondents were greater than 0.05.

Frequency of Visits and Size of Groups

A regression test indicated that respondents who were interviewed as members of a large group were less likely to be frequent visitors to the park than solitary and small group respondents (summer users, $r = -0.24$, $p < 0.01$; winter users, $r = 0.08$, $p > 0.05$). This relationship was observed to be stronger for summer than for winter users.

Frequency of Visits and Number of Dependent Children

Frequency of visits was found to be negatively associated with the number of dependent children in the respondent's household. The greater the number of dependent children, the less likely was the chance of the respondent being a frequent visitor (summer users, $r = -0.19$, $p < 0.01$; winter users, $r = -0.15$, $p = 0.06$). Again, this relationship was observed to be weaker for the winter sample.

Frequency of Visits and Type of Dwelling Unit

Apartment dwellers were more likely to be frequent visitors than were respondents from single family detached housing units (winter users, $x^2 = 13.4$, $p < 0.01$ with 3 DF; summer users, $x^2 = 8.01$, $p < 0.05$ with 3 DF). Hendricks' (1971, p. 419) insistence that apartment dwellers are highly active in urban forms of leisure is supported by the data from Mayfair Park.

TABLE 16

CHI-SQUARE ANALYSIS OF FREQUENCY OF VISITS TO MAYFAIR PARK AS EXPLAINED BY SELECTED VARIABLES

VARIABLE	CHI-SQUARE		DEGREES OF FREEDOM		SIGNIFICANCE LEVEL	
	Summer	Winter	Summer	Winter	Summer	Winter
Age	15.68	2.74	9	9	>.05	>.05
Sex	7.95	3.08	3	3	<.05	>.05
Occupation	20.7	5.26	15	9	>.05	>.05
Working hours	11.40	14.15	6	6	>.05	<.05
Type of Dwelling	8.01	13.37	3	3	<.05	<.01
Number of Children	10.74	13.24	3	9	<.01	>.05
Size of Group	29.72	5.23	6	6	<.01	>.05
Type of Group	21.1	16.40	9	9	<.01	>.05
Travel Time	11.87	14.55	6	6	>.05	<.05

Total Sample Size: 252 respondents

Source: Mayfair Park Questionnaires 1976-1977.

Summary

Table 16 shows the relationships between the frequency with which interviewees visited Mayfair Park and nine selected independent variables. Significant variables influencing visitor frequency were the sex of the respondent, the type of dwelling, the number of dependent children, the size of the visitors group in the park and the travelling time from the respondent's home address. In only one case, that of the type of dwelling unit, was the chi-square test found to be significant for summer and winter users. Working hours, affected frequency of visits more in the summer than in winter, probably due to the dominance of weekend use in the winter. The lack of significant values for the chi-square tests on the other variables cannot so easily be explained. Sex, for example affects visitor frequency in summer, but not in winter. Further analysis needs to be completed to resolve this apparent difficulty. Occupation and age were not related to frequencies of visits to Mayfair Park. The results of many studies are contradicted by this finding.

ACTIVITY PATTERNS

Method of Determining Activity Patterns

Outdoor recreational behaviour is characterized by the almost limitless range of activities which people pursue during their leisure time. Recreational activities have been classified as active or passive; as conceptually related behavioural groupings (Burch, 1965; Hendee et al., 1971); or, more recently, as clusters of related activity packages (Romsa, 1973; Becker, 1976). For the purposes of this section of the thesis, none of these approaches have been used; rather, activities have been broadly defined as including all forms of recreational behaviour, physical and experiential, reported by visitors to Mayfair Park in the park user survey.

On-site activity patterns were determined for each respondent in several ways. Lists of summer and winter activities were derived from the pilot questionnaire and from observations of recreationists in the park. Twenty-three summer activities and ten winter activities were coded into closed ended questions in which interviewees were asked to indicate how often they engaged in each activity. The activity check list was thorough, but not exhaustive, and so visitors were also asked for any additional activities not covered in the list.

THE TYPES OF ACTIVITIES

Summer Activities

The most popular summer activities in Mayfair Park were, in order, walking, picnicking, driving for pleasure, eating lunch, sunning and relaxing, throwing a frisbee and reading a book (Table 17). Of the ten most popular activities in the park, seven are characterized by their passive nature and only three, throwing a frisbee, football and jogging, are highly active pastimes. This does not mean that active pursuits are of little significance as a great range of physically active pursuits was undertaken by park visitors. For the most part though, higher participation rates were reported for those non-organized, generally passive pursuits which could be engaged in casually by the respondents. The less popular activities were those for which special equipment was necessary (for example, fishing, badminton, volleyball and playing the stereo); or, those activities dependent on the availability of special facilities. An example of the latter is the activity "arts and crafts", where the City Parks and

TABLE 17

SUMMER ACTIVITIES IN MAYFAIR PARK RANKED BY DEGREE OF PARTICIPATION AS REPORTED BY RESPONDENTS

ACTIVITY	NO. OF PARTICIPANTS	PERCENT OF TOTAL SAMPLE
Rank		
1. Walking	128	85.3
2. Picnicking	125	83.3
3. Driving for pleasure	122	81.3
4. Eating Lunch	115	76.6
5. Sunning/Relaxing	110	73.3
6. Frisbee	100	66.7
7. Read a Book	99	66.0
8. Take child to playground	73	48.7
9. Football	64	42.7
10. Jogging	57	38.0
11. Cycling	53	35.3
12. Boating	51	34.0
13. Attend concert	49	32.7
14. Baseball	46	30.7
15. Soccer	43	28.7
16. Watch sports	40	26.7
17. Fish	39	26.0
18. Badminton	36	24.0
19. Play the stereo	35	23.3
20. Volleyball	30	20.0
21. Walk a dog	19	12.7
22. Arts and Crafts	17	11.3
23. Horseride	16	10.7
TOTAL	1,477	-

Total Sample Size: 150

Source: Mayfair Park Summer Questionnaire 1976.

Recreation Department runs workships for various crafts during the summer months.

Results of the Mayfair Park summer survey can be compared with two studies; Proudfoot's (1965) survey of summer activities in major parks and large playgrounds in the North Saskatchewan River valley, and the 1971 City of Edmonton Parks User Survey. Proudfoot's classification of activities was very general. He simply divided a large number of differing activities into active and passive pursuits and in this way much information was lost. Casual visitors to major parks were asked in what way they planned to participate and 56 percent of Proudfoot's sample favoured passive participation, compared with 44 percent active (1965, p. 23).

Rather more helpful is the Parks User Survey carried out in the summer of 1971. In this survey, nature appreciation or relaxing and picnicking were cited by 29.4 and 25.9 percent of visitors to major city parks as their major activity on the day of the interview. "Children's play" with 14.1 percent and walking with 13.5 percent were other frequently mentioned activities. Active sports, such as football, soccer and baseball were of marginal importance, accounting for the main activity of less than 3 percent of major park visitors.

Mayfair Park, it seems, has a higher percentage of visits for the purposes of walking for pleasure and picnicking than is the average for Edmonton's major parks. All forms of active sports are rated higher in Mayfair Park than in the parks studied in the Parks User Survey. Moreover, a greater variety of activities appear to take place in Mayfair Park, though this may be partially explained by the coding scheme utilized in the City's survey which collapsed several sporting activities into one or two all-embracing categories.

Winter Activities

Favoured winter activities in Mayfair Park were skating, relaxing and sitting, walking and driving for pleasure. Skating was the most popular single activity mentioned in the total sample, with 94.1 percent of all winter respondents participating at least "sometimes" (Table 18). Fifty-eight percent of winter visitors skated "often". Winter activities were characterized by their generally more active nature. Five of the ten most mentioned activities were active pursuits, and at least two of the remaining activities entail a degree of physical effort. Obviously, this trend can be explained by Edmonton's cold winter climate as temperatures on the winter interview days ranged from -16° to 0°c.

Useful comparisons can be made between the winter data from Mayfair Park and the Ontario Recreation Survey (Yewer and Heit, 1975) that reported on the all year recreation patterns of over 10,000 Ontario residents aged over 12 years. In the Ontario survey forty-five recreational activities were ranked in order of popularity and the characteristics of participants in each activity were examined and presented in a series of tables. Of particular comparative interest is Table 1 which ranks the forty-five activities according to rates of participation which are defined as: "the percent of respondents who participated at least once in recreational activities in the last twelve months" (Yewer and Heit, 1975, p. 4).

Ice-skating, the most popular activity in Mayfair Park, ranks fifth in the Ontario survey with 30.6 percent of the nearly 10,000 respondents participating at the rate defined above. Recreational

TABLE 18

WINTER ACTIVITIES IN MAYFAIR PARK, RANKED BY DEGREE OF PARTICIPATION AS REPORTED BY RESPONDENTS

ACTIVITY	NO. OF PARTICIPANTS	PERCENT OF TOTAL SAMPLE
Rank		
1. Skating	96	94.1
2. Relaxing	91	89.2
3. Walking	84	82.3
4. Driving for pleasure	70	68.6
5. Photography	45	44.2
6. Tobogganing	34	33.3
7. X-Country Skiing	28	27.4
8. Jogging	28	27.4
9. Walking a dog	22	21.6
10. Snowshoeing	10	9.8
TOTAL	508	-

Total Sample Size: 102

Source: Mayfair Park Winter Questionnaire 1977.

driving, the fourth most favoured winter activity in Mayfair Park with 68.6 percent of respondents participating, rates second in the Ontario study with 64.0 percent. Data on walking and relaxing were not collected for the Ontario survey, but tobogganing ranked seventh with 21 percent, snowshoeing 25th with 4.3 percent, and cross-country skiing 30th with 2.7 percent. Higher rates for participation in almost all activities for the Mayfair Park sample are to be expected as the Ontario survey was a home-based interview questionnaire whereas the Mayfair survey was administered on site. What is particularly interesting for comparative purposes is that the relative popularity of the activities in both samples was fairly similar.

ADDITIONAL ACTIVITIES

Summer

Respondents were asked if there were any other activities, not mentioned in the activity check list, in which they participated. Twenty-eight summer respondents mentioned additional activities which showed a very wide range of pursuits took place in the park. Additional activities included social activities, which, for young males occasionally prompted the response: "I come here to try to pick-up girls," or, "I often watch the girls" (4 respondents). Showing out-of-town visitors the park was mentioned by three respondents and "meeting people" was reported as an activity by two park visitors.

Retreat type activities were offered by several respondents. One young male went to the park often to "meditate", another to "write short stories", and a retired minister found the more secluded areas of the park well suited for quiet prayer. Among the more active pursuits mentioned as additional activities were calisthenics (1 respondent), lawn darts (2) and 'hang gliding' (2).

Winter

Winter respondents reported far fewer additional activities in Mayfair Park than summer users. Kite flying was mentioned by three respondents and picnicking by twelve. Picnicking was not included in the winter activity check list. It was felt that Edmonton's winters were too cold for this activity. The writer has subsequently noticed that on fine winter days visitors will occasionally have a barbeque or picnic lunch in the park. The only other additional activities mentioned by winter visitors were throwing a frisbee, playing catch (2 respondents) and "necking" (1).

Discussion

The popularity of picnicking, walking, driving for pleasure and ice-skating in Mayfair Park is not surprising as these activities are among the ten most commonly pursued outdoor recreational activities in Canada today (Burton, 1976, pp. 44-45). What is surprising is the variety of activities identified by respondents in Mayfair Park and the frequency with which these activities are pursued. Nearly 50 percent of summer visitors stated they participated in ten or more activities in the park at least "sometimes". Ninety-five percent of summer users engaged in at least three activities. Winter visitors also reported a high degree of participation in winter activities with 66.7 percent of interviewees participating in 5 or more activities. Eighty-seven percent engaged in at least 3 activities.

CYCLES OF RECREATIONAL PARTICIPATION

Patterns of recreational activities have been shown in many studies to vary considerably over time. Rugg (1974) and others have identified the existence of a time-space continuum (Coppock and Duffield, 1975, p. 23) in which the time available for recreational engagements is separated into vacation time, weekends and weekdays. Masser (1966), Colenutt (1969), Goldin (1971, pp. 84-85) and Scherer and Coughlin (1972), working in varying settings, have noted that winter use of recreational sites is much less intensive than summer use.

Masser, for example, found that over half the population of his sample visited local open spaces in Birmingham, England, one or more times a week in the summer, while in the winter months less than a quarter (23.4 percent) visited as frequently.

The effect of vacations on activity patterns in Mayfair Park was not examined, but the seasonal and weekly variations in the leisure time activities of respondents were considered important.

Seasonal Variations in Activity Patterns

From Tables 17 and 18 it can be seen that winter users of Mayfair Park participate in a narrower range of activities than summer visitors. Of those activities common to summer and winter - driving for pleasure, walking a dog and relaxing - a tendency towards more frequent participation by summer respondents was discerned. Only one of these common activities, walking a dog, was more popular among winter park users. This can perhaps be explained by the City Council By-laws which prohibit dogs from almost all parks in Edmonton. Thus, respondents were wary of admitting to an illegal action. In these circumstances, information collected for this activity may be regarded as unreliable.

Weekly Variations in Activity Patterns

High patronage of Mayfair Park on weekends tends to complicate this simple pattern of seasonal fluctuation in uses. Winter weekend use is particularly heavy as it is concentrated in a smaller area of the park. In the English context, Sillitoe (1969, p. 41) describes results from a survey showing winter weekend visits to recreational sites to be as numerous as summer weekday visits, which in turn, were a quarter of summer weekend visits. These findings are confirmed by the data from Mayfair Park with one major qualification; weekend winter use is, if anything, even more significant than Sillitoe has suggested. The data show that weekend only use accounts for 65.7 percent of winter visits and 32.7 percent of summer visits.

This pattern of heavy weekend use was confirmed by a cross-tabulation of the total number of activities engaged in by a respondent with the weekly timing of the park visit. Weekend visitors, in both summer and winter, participated in a greater number of on site activities than visitors who usually came to the park on weekdays (summer $x^2 = 21.7$, $DF = 6$, $p < .01$; winter $x^2 = 10.8$, $DF = 4$, $p < .05$). Therefore, weekend use of Mayfair Park accounts for a significant percentage of total park visits and is characterized by the greater number and variety of activities undertaken by the park users.

Although the number and variety of activities engaged in by respondents was affected by the weekly timing of the park visit, particular activities are less sensitive to this variable. Weekend and weekday visitors alike showed few variations in participation rates for particular winter activities. The only exceptions to this general trend were cross-country skiiers and winter joggers. Cross-country skiiers tended to visit the park predominantly during the weekend ($x^2 = 16.1$, $DF = 4$, $p < .01$), while joggers were more flexible in the timing of their visits. Still, a majority of joggers responded that their visits were usually during the week ($x^2 = 10.0$, $DF = 4$, $p < .05$).

It was found that the summer sample repeated this pattern. In most cases, the various activities mentioned by the respondents were not associated with the weekly timing of the park visit.

Exceptions to this general picture were noted for the activities picnicking and sunbathing. One hundred and twenty-two persons reported participation in the activity picnicking, and most of these people chose a weekday to visit Mayfair Park ($x^2 = 10.03$, $DF = 4$, $p < .05$). Sunbathers, in contrast, usually chose the weekend for their park visits ($x^2 = 13.1$, $DF = 4$, $p < .01$).

The Characteristics of Weekend Compared with Weekday Visitors

Crosstabulations of the weekly timing of the park visit with the age-groups of respondents demonstrated that the youngest and oldest of the four age-groups made a higher percentage of weekday visits. Put another way, the working population, those aged from 20 to 50 years, were more frequent weekend-only visitors (summer users $x^2 = 14.9$, $DF = 6$, $p < .05$; winter users $x^2 = 6.1$, $DF = 4$, $p > .05$). Winter weekend visitors revealed a tendency to stay longer in the park than weekday visitors ($x^2 = 14.9$, $DF = 6$, $p < .05$), but this relationship was found to be weaker in the summer sample ($x^2 = 6.5$, $DF = 4$, $p > .05$). Respondents' working hours were not significantly related to the weekly timing of the park visit (summer $x^2 = 3.3$, $DF = 4$, $p > .05$; winter $x^2 = 8.5$, $DF = 4$, $p > .05$). Among the other variables tested by chi-square analysis for possible association with the timing of the weekly visit were the sex of the respondent, the type of dwelling lived in, and the number of children at home. All of these variables revealed a low degree of association with p values greater than .05.

GROUP SIZE AND ACTIVITIES IN MAYFAIR PARK

Small groups numbering two to four persons comprised 56 percent of summer respondents and 68.6 percent of winter visitors (Table 4). Many of these small groups were family groups. Table 19 shows that a majority of summer and winter visitors were members of groups of 2, 3 or 4 persons (summer 60.3 percent, winter 68.6 percent). Forty-five percent of these small group summer visitors were related by ties of kin, compared with 34.3 percent of winter visitors. These data suggest that activity patterns in Mayfair Park are characterized, if not generated by small groups of park visitors engaging in numerous and varied pursuits. Many of these activities that take place in the park provide an opportunity for social interaction within these small groups of visitors: picnicking and skating are good examples.

TABLE 19

THE DISTRIBUTION OF MAYFAIR PARK VISITORS AMONG DIFFERING TYPES OF GROUPS BY THE SIZE OF VISITOR GROUPS

GROUP TYPES	NO. OF RESPONDENTS IN GROUPS OF DIFFERING SIZES							
	Summer Group Sizes				Winter Group Sizes			
	1	2-4	5 or more	Sum %	1	2-4	5 or more	Sum %
Single Person	32	-	-	22.7	5	-	-	4.9
Family Group	-	38	4	29.8	-	24	4	27.5
Friends	-	40	14	38.3	-	43	19	60.7
Other Groups	-	7	6	9.2	-	3	4	6.9
TOTAL	32	85	24	100.0	5	70	27	100.0
	$X^2=151.8$, DF=6 $p<.01$				$X^2=130.8$, DF=6 $p<.01$			

Source: Mayfair Park Questionnaires, 1976-77.

(a) Row Sum is expressed as a percentage of the total sample size.

To determine whether group size, and by inference, group type, was associated with different park activities, a series of crosstabulations were performed. Groups were coded into three sizes: groups of 1, groups comprising 2 to 4 people, and groups containing 5 or more people. Activities were coded into three categories (often, sometimes, never) according to the respondent's frequency of participation. Twenty-three summer activities and ten winter activities were tested against the size of respondent's groups and the results are presented in Tables 20 and 21.

As shown, winter activities were more 'social' than summer activities as a smaller percentage of the total number of participants in winter activities were members of single-person groups. In the winter sample, tobogganing, and curiously, dog walking, were activities frequently reported by groups of 5 people or more. In summer, taking a child to the playground and fishing were activities commonly involving members of the larger groups recorded in the park. Summer respondents who visited the park to read a book, to go jogging, or to sunbathe were more likely to go to the park alone. Football is an activity frequently reported by persons who were without company in the park when interviewed. This can be explained either by respondents reporting an activity they pursue on other occasions in the park or, by visitors going to the park alone in the hope of joining casual football games that have been started by others. During the course of the summer interviews several of these informal games were observed. Young people sitting near one of these games would be invited to join one of the 'teams'. This process of casual social encounters through various activities appears to be an important function of Mayfair Park.

TABLE 20

CROSSTABULATION OF GROUP SIZE AND SUMMER ACTIVITIES IN MAYFAIR PARK

ACTIVITY	PERCENTAGE OF PARTICIPANTS IN EACH ACTIVITY BY THE SIZE OF THE RESPONDENT'S GROUP			
	NUMBER IN GROUP			SIGNIFICANCE LEVEL
	1	2-4	5 or more	
Walking	18.7	61.2	13.2	$p < .05$
picnicking	19.2	48.6	15.2	-
driving 21.3	21.3	58.2	14.7	-
eating lunch	17.4	60.0	14.8	-
sunning/relaxing	26.4	58.2	10.9	$p < .05$
frisbee	21.0	58.0	14.0	-
read a book	26.3	61.1	12.6	$p < .05$
take a child to the playground	12.3	54.8	24.7	$p < .05$
football	25.4	64.4	10.1	-
jogging	34.0	60.0	6.0	$p < .05$
cycling	22.6	60.3	5.7	-
boating	15.2	65.2	19.6	-
attend concert	16.3	69.4	8.2	-
baseball	18.6	67.4	13.9	-
soccer	20.9	66.7	10.2	-
watch sports	21.7	67.4	10.9	-
fish	17.9	53.8	17.9	-
badminton	17.6	70.6	11.7	-
play stereo	20.5	73.5	5.7	-
volleyball	20.0	70.0	10.0	-
walk a dog	10.5	73.7	15.8	-
arts/crafts	33.3	60.0	6.7	-
horseride	12.5	81.3	6.25	-

Source: Mayfair Park Summer Questionnaire 1976

"-" Crosstabulation for which p values were not significant at the .05 level of confidence.

TABLE 21

CROSSTABULATION OF GROUP SIZE AND WINTER ACTIVITIES IN MAYFAIR PARK

ACTIVITY	PERCENTAGE OF PARTICIPANTS IN EACH ACTIVITY BY THE SIZE OF THE RESPONDENT'S GROUP			
	NUMBER IN GROUP			SIGNIFICANCE LEVEL 'p'
	1	2-4	5 or more	
Skating	5.2	68.8	26.0	-
Relaxing	4.3	68.1	27.5	-
Walking	3.6	65.5	30.9	-
Driving for pleasure	1.4	70.0	28.6	-
Photography	6.7	68.9	24.4	-
Tobogganing	2.9	61.8	35.3	-
X C Skiing	10.7	67.9	21.4	-
Jogging	-	78.6	32.1	-
Walking a dog	4.5	59.1	36.4	-
Snowshoeing	20.0	60.0	20.0	-

Source: Mayfair Park Winter Questionnaires, 1977.

Total sample size 102, "-" = crosstabulations for which 'p' values were not significant at the .05 level of confidence.

RESPONDENTS REPORTING PARTICIPATION IN NUMEROUS ACTIVITIES: "SUPER PARTICIPANTS"

During the course of questionnaire analysis, it became apparent that there was a class of respondents that could be regarded as "super participants', or perhaps as 'hard core' Mayfair Park users. To determine the characteristics of these respondents, a series of regressions was run treating the total number of activities reported as the dependent variable, and a number of descriptive variables as the independent variables.

Age was found to be strongly associated with the total number of activities reported by park visitors. Younger interviewees were more versatile in their summer activity patterns ($r = -.41$, $p < .01$) but this relationship all but disappeared for winter park users ($r = -.05$, $p > .05$). Members of large groups were more likely to be participants in many activities in the winter sample ($r = .17$, $p < .05$) but this inclination was not evident for the summer sample ($r = .07$, $p > .05$). Frequent winter visitors reported participation in more activities than less frequent visitors ($r = .15$, $p < .05$) but no relationship between these two variables was discerned in the summer sample ($r = .03$, $p > .05$). Length of stay correlated closely with the number of activities for summer park users ($r = .27$, $p < .01$) but not for winter users ($r = .06$, $p > .05$). Summer visitors with children engaged in a greater number of activities than those without children ($r = .23$, $p < .05$) but this relationship did not hold for winter visitors ($r = .07$, $p > .05$).

In summary, those variables affecting the number of activities participated in by respondents varied with the seasons. Winter 'super participants' were frequent visitors to Mayfair Park and were more often members of the larger groups. Summer users who reported participation in many activities were the younger members of the sample, those who tended to stay longer in the park, and those with dependent children at home.

USERS' PERCEPTIONS OF MAYFAIR PARK

LIKES AND DISLIKES

In general, respondents held positive views towards Mayfair Park. Ninety percent of winter and 93 percent of summer visitors rated the facilities adequate in a structured question (question 14 in both questionnaires) and 85.3 percent of winter and 89 percent of summer respondents described the park as a good place to bring children (question 22 and 24 respectively). Moreover, 92 percent of summer users liked the architecture of the park's buildings and 91 percent thought it blended with the environment. These structured questions proved somewhat unhelpful due to the very high ratings reported by interviewees. A better guide was provided by the open-ended questions where users were asked to list what they particularly liked about the park and what they particularly disliked.

Responses to the open-ended questions indicated as above that the respondents valued the park quite highly. Twice as many likes as dislikes were recorded for summer and winter visitors alike. A sizeable minority however, were dissatisfied with the adequacy of the facilities (20 percent of winter and 13 percent of summer), a concern which would have been totally ignored if the structured questions alone were relied upon. Another 19 percent of summer users and 16.7 percent of winter users complained about people-related issues; examples included crowding and management problems such as the restricted opening hours of the pavilion-concession. Litter, garbage and the destruction of park vegetation by vandals were mentioned by 11 percent of summer respondents. Winter users seemed less concerned about litter and vandalism as these problems were mentioned

TABLE 22

CATEGORIZED LIKES OF SUMMER RESPONDENTS
Answers to Open-ended Question 10:
"What do You Particularly Like about the Park?"

CATEGORY	NUMBER	PERCENT
Scenery	60	40.0
Size	42	28.0
Facilities	55	36.7
Relaxing Atmosphere	38	25.3
Park Vegetation	30	20.0
Cleanliness	22	14.7
Convenience	15	10.0
Variety	10	6.7
Privacy	10	6.7
Sociability	10	6.7
Naturalness	19	12.7
No Response	-	-
TOTAL	314	-

Source: Mayfair Park Summer Questionnaires 1976
Total sample size 150.

Convenience includes references to the proximity of the park to the respondent's home, ease of access, etc.

Scenery includes references to the view of the city or the river from the park as well as general comments such as the park is pretty, or beautiful.

Variety refers to respondents citing the many things to do, the combinations of facilities and areas for both children and adults, etc.

Naturalness includes references such as: the feeling of nature, the feeling of being outdoors, the wildlife, etc.

Sociability includes references to meeting people, watching the girls, gathering place for friends, etc.

Park vegetation includes specific references to the trees, flowers, or the grassed areas in the park.

Privacy refers to responses such as: can find a spot of your own, the solitude, the emptiness, and, it's a park without people.

Relaxing atmosphere includes reference to the peace and quiet, the serenity, away from noisy traffic, etc.

TABLE 23

CATEGORIZED LIKES OF WINTER RESPONDENTS
Answers to Open-ended Question 9:
"What do you Particularly Like About the Park?"

CATEGORY	NUMBER	PERCENT
Facilities	65	63.7
Scenery	37	36.3
Relaxing atmosphere	16	15.7
Size	31	30.4
Convenience	6	5.9
Sociability	12	11.8
No response	-	-
TOTAL	167	-

Source: Mayfair Park Winter Questionnaire 1977
Total Sample Size 102

Percentages have been rounded

Activities includes references to the park as a place for a particular activity e.g. skating, skiing.

by only 6 and 2 people respectively.

When likes and dislikes are compared for summer and winter users (Tables 22 to 25) it is apparent that the two samples are widely divergent. This was allowed for in the coding schemes, by classifying the likes and dislikes for each sample in two ways. An extended coding scheme was first derived whereby responses were recorded and placed into many categories. A second scheme collapsed these responses into 5 or fewer categories for the purposes of crosstabulation with other variables. Tables 22 to 25 present the expansive coding schedules.

Likes

Summer visitors mentioned a wider variety of likes which were coded into 11 categories against 6 for the winter sample. The categories of naturalness, privacy, variety, vegetation and cleanliness, were rarely, if ever, mentioned in the winter sample and were omitted. Privacy was an aspect of the park liked by 7 percent of summer users and a further 13 percent liked the feeling of nature to be found there. The relaxing atmosphere was cited by a quarter (25 percent) of the summer sample yet by less than a sixth (16 percent) of the winter sample.

Perhaps the strongest divergence in the way that summer and winter respondents conceptualized the attractions of the park was noted in the category response "facilities". Sixty-four percent of winter park visitors liked the facilities. They liked in particular the ice for social skating and the pavilion where they could rest, and buy refreshments. To summer visitors the facilities were generally not as important and fewer (37 percent) listed them among their likes.

A further difference was noted between the two samples in the total number of likes recorded. Summer respondents mentioned a total of 314 likes for a mean of 2.09 likes each. Winter visitors listed 167 likes at 1.64 likes each. Moreover, most winter users reported one like each whereas the modal number of summer responses was two likes.

These data reflect the results obtained from the questions on activity patterns in Mayfair Park. It was found, first, that a greater number and variety of activities take place in the park in summer, and second, that retreat-type activities were more important in that season. It would appear from Tables 22 and 23 that summer and winter respondents conceptualize the attractions of the park in different ways. Summer respondents are more likely to refer to the park as an escape from the more unpleasant aspects of urban living. They were more aware of the environmental elements of the park and commonly cited likes such as the vegetation or the combination of wooded and open areas. Winter users, on the other hand, were more attracted to specific facilities, despite the non-use of the adventure playground in that season. They rated social interaction higher than summer users (12 percent compared with 9 percent) and they were more likely to mention an activity connected to a park facility (for example "the skating" was a common response).

Dislikes

Summer visitors expressed a total of 122 dislikes, an average of 0.81 per respondent (Table 24). No single overriding concern was evident. Instead, summer visitors disliked inadequate facilities (13 percent), management-related issues (12 percent), environmental problems such as litter and broken glass (11 percent), and a series of discomforts related to the social carrying capacity of the park (for example, noise, crowds and the presence of cars). Five percent disliked the design. Of these, two users thought the adventure playground was poorly constructed, two others blamed the road design for traffic tie-ups, and another visitor found the walking trails too steep for the elderly.

Winter users, in contrast, were more affected by inadequate facilities (20 percent) and the presence of crowds (17 percent). They were less likely to mention environmental problems (6 percent) or the psychological discomforts caused by noise and the presence of cars. A further 14 percent of the winter sample were disturbed by the proposed change of the name of the park from Mayfair Park to William Hawrelak Park. This finding reflected the timing of the winter survey which coincided with the controversial City Council decision to rename the park. Strong resentment of this change was indicated not only by the survey results, but by the repeated destruction of the park signs bearing the new name. On one of the interview days the sign at the park entrance announced: "Mayfair Park - The People's Choice!"

TABLE 24

CATEGORIZED DISLIKES OF SUMMER RESPONDENTS

Answers to Open-ended Question 11:

"What do you particularly dislike about the park?"

	NUMBER	PERCENT
Inadequate facilities	20	13.3
Management issues	18	12.0
Environment	17	11.3
Presence of cars	13	8.7
Noise	11	7.3
Crowds	8	5.3
Design factor	8	5.3
Other	3	2.0
No dislikes mentioned	52	34.7
TOTAL	98	99.9

Total sample size 150.

Source: Mayfair Park Summer Questionnaires 1976.

Management Issues refers to responses such as dogs on the loose, beer drinking, loud speaker intrusion, motorcyclists on trails, etc

Environment includes environmental issues like litter, garbage, broken bottles, polluted lake poisonous berries, fouling of park by dogs, etc.

Design factor includes references to the park buildings, the landscaping, too flat, too well planned, not enough flower beds, etc.

Other dislikes were "hippies", not enough girls, and the presence of wasps.

TABLE 25

CATEGORIZED DISLIKES OF WINTER RESPONDENTS
Answers to open-ended question 10:
"What do you particularly dislike about the park?"

	NUMBER	PERCENT
Inadequate facilities	20	19.6
Crowds	17	16.7
The new name	14	13.7
Environment	6	5.9
Other	6	5.9
No dislikes mentioned	39	38.2
TOTAL	63	100.0

Total sample size 102.

Source: Mayfair Park Winter Questionnaire 1977.

The new name refers to the politically sensitive issue of the renaming of Mayfair Park to William Hawrelak Park after the late Mayor of Edmonton.

Other dislikes were dogs on the loose (3), the closing of the park at 11:30 p.m. (2), and vandalism (2).

Relationship Between Likes and Dislikes and Other Variables

Likes and dislikes were related to a number of other variables. Some of the most consistent relationships were with the age of the respondent. The oldest age group of summer users more frequently liked the park's scenery ($\chi2 = 14.9$, Df = 3, $p < .01$) than did the younger groups of the sample. Thirty-one percent of those over 50 in the summer sample liked the feeling of nature compared with 8 percent of the younger group. The relaxing atmosphere was also more important with increasing age (cited by 30 percent of those over 50 and 13 percent of those under 20). On the other hand, the park vegetation was more often liked by the young than by the older respondents ($x^2 = 8.4$, DF = 3, $p < .05$). When dislikes were considered, 31 percent of summer visitors over 45 were concerned with noise, compared with 4.3 percent of respondents under 20 and 7 percent of those aged 21 to 30. Management related dislikes were also more frequently cited by the older park users.

For the winter sample, age was not as strong a determinant of likes and dislikes. The oldest age group, however, was more aware of the scenery as 63 percent liked it, compared with only 25 percent of the youngest group. In contrast, the younger visitors were more disturbed by the proposed change in the name of the park. Sixty-two percent of those who disliked the new name were under 25 years.

Another influential variable determining likes and dislikes was the number of children in the respondent's household. Those with children liked the variety (summer users $x^2 = 4.01$, DF = 1, $p < .05$), and mentioned a greater number of likes than respondents without children ($x^2 = 8.3$, DF = 1, $p < .01$). Of those who were affected by the presence of cars, 93 percent had dependents at home ($x^2 = 3.3$, DF = 1, $p < .07$). Respondents with children at home were found to be more tolerant of noise (summer users $x^2 = 4.6$, DF = 1, $p < .05$) and of crowding (summer $x^2 = 3.8$, DF = 1, $p < .06$).

The sex of the respondent was also related to likes and dislikes in several ways. Females, for example, more frequently cited scenery as a like than did males (57 percent compared with 40.6 percent). A greater percentage of respondents who liked the retreat type aspects of the park (the naturalness, the privacy and the relaxing atmosphere) were women (60 percent versus 40.3 percent).

Finally, the respondent's occupation was in some cases related to likes and dislikes. In the summer sample, naturalness was more important to the retired and the unemployed than to the other occupational groups ($x^2 = 15.3$, DF = 5, $p < .01$). Facilities were most often mentioned by professionals and by housewives, and least often liked by blue collar workers ($x^2 = 13.3$, DF = 5, $p < .05$).

REASONS FOR VISITING MAYFAIR PARK

Respondents were asked what particular factors influenced their decision to visit the park on the interview day. The question was open-ended and, as with likes and dislikes, answers were recorded in two ways. For the purposes of crosstabulations answers were coded into four broad categories: push factors, including responses not directly connected to the park's attractions; facilities and activities; the park as a retreat from urban pressures, including references to "getting away from it all", or relaxing; and other reasons, which included a diverse range of responses. Such a broad coding scheme did not reflect the wide range of reasons people gave for their park visits. Neither did this scheme account for the respondent who gave several reasons. To overcome these deficiencies, reasons were also recorded in greater detail. Tables 26 and 27 present these detailed codes for summer and winter users.

To summer visitors, "push factors" (58 percent), the park as a retreat (23 percent), social reasons (19 percent), and activities (18 percent), were the major reasons for coming to the park. Facilities rank only fifth although this may have been the result of separating

TABLE 26

REASONS FOR VISITING MAYFAIR PARK

Answer to question 12:

"What particular factors influenced your decision to come here today?"

REASON	NUMBER	PERCENT
Push factors	87	58.0
Retreat	34	22.7
Social factors	28	18.7
Activities	27	18.0
Facilities	17	11.3
Location/convenience	16	10.7
Appearance	9	6.0
TOTAL	218	-

Source: Mayfair Park Summer Questionnaire 1976

Push factors include reasons not directly connected with the park for example, "nothing else to do", "the weather", "just killing time".

Retreat reasons include references to relaxing, contemplation, peace and quiet, getting away from the noise, etc.

Social factors include references to meeting people or friends, showing an out of town visitor the park, an outing for the children, etc.

Location/ convenience reasons include references to the park's location, the ease of access or its proximity to the home, etc.

TABLE 27

WINTER RESPONDENTS' REASONS FOR VISITING MAYFAIR PARK
Response to Question 11:
"What particular factors influenced your decision to come here today?"

REASON	NUMBER	PERCENT
Push factors	45	44.1
Activities	43	42.2
Social factors	20	19.6
Facilities	12	11.8
Location/convenience	9	8.8
Appearance	5	4.9
Other	5	4.9
TOTAL	139	-

Source: Mayfair Park Winter Questionnaire 1977.

activities from facilities in the coding system used. Respondents would often give an activity, dependent on a park facility, as their major reason for visiting. A respondent might say for example "I came here to fish", which would then be recorded as an activity. The activity fishing, however, would involve the use of a facility, the lake. These related responses were recorded separately for the sake of accuracy.

Winter users also ranked push factors of major importance in their park visits. Activities were cited more frequently than for the summer sample (42 percent compared with 18 percent) reflecting the generally more active nature of winter users of the park. Retreat type reasons were not recorded for winter users. This very important function of the park in summer accounts for very little of its winter use. An unexpected finding was the low rating given the appearance of the park by summer and winter respondents alike. In general, the answers to this question show that the "pull" of the park is less dependent on aesthetics, facilities and locational attributes than on factors external to the park itself. Most visits were prompted by reasons such as the favourable weather, the availability of leisure time, the motivation to relax or perhaps to meet friends, and the failure to think of anything else to do. The implications for planners in these results are somewhat pessimistic.

Reasons for Coming and Relationships With Other Variables

The reasons respondents gave for visiting the park were related to a number of other variables. In the summer sample, retreat-type reasons were more often given by the oldest age-groups than by the younger respondents. Fourty-six percent of those over 45 years cited this reason compared with 4.3 percent of those under 20 years ($x^2 = 7.4$, DF = 3, $p < .06$). Facilities were more important to those aged between 20 and 50 in the summer sample ($x^2 = 9.3$, DF = 3, $p < .05$) and a similar tendency was noted for winter users. This age group also cited a greater number of reasons for their visits. Facilities exerted a greater pull on this age group presumably because they were more likely to have dependent children. In the summer sample, social factors were mentioned more often by those over 45 (75 percent) than by those under 25 (47 percent).

Occupation explained a degree of the variance noted in reasons given for park visits. For the summer sample, push factors were commonly cited by students, facilities were important to housewives, and retreat type reasons were given most frequently by the retired and the unemployed ($x^2 = 29.0$, DF = 15, $p < .01$). White collar workers and housewives gave the greatest number of reasons for visiting while retired and unemployed users gave the fewest.

Those with dependents at home often cited activities or facilities as determining their park visits. This finding was observed for winter and summer users. Respondents without children went to the park more often for the purposes of relaxation or retreat than those with children (summer users $x^2 - 9.5$, DF = 3, $p < .05$). Similarly, visitors without children were more likely to have gone to the park for "push" reasons (summer $x^2 = 5.8$, DF = 1, $p < .01$). Social factors were more likely to have determined the visits of respondents with children than those without (summer $x^2 = 4.9$, DF = 1, $p < .05$). In most cases respondents with dependent children were more likely to give a reason connected with some specific attraction within Mayfair Park. People without children, on the other hand, often cited rather nebulous reasons for their park visits. Responses such as "the weather", "nothing else to do", were commonly given by respondents without children at home, whereas visitors accompanied by children would likely cite "the playground", "the barbeques", or "to have a picnic".

RESPONDENTS' OPINIONS OF FACILITIES IN MAYFAIR PARK

It is apparent from Table 28 that users are generally satisfied with the facilities in Mayfair Park. Summer users were particularly satisfied with the trails, the playing fields and the picnic shelters. Winter users liked the lake for skating and the trails. A few facilities were described as inadequate and, on the whole, winter users seemed less satisfied with the facilities than

TABLE 28

RESPONDENTS' OPINIONS OF FACILITIES

Question 13: Could you please indicate those facilities you consider adequate and those you consider inadequate?

SUMMER RESPONDENTS

FACILITY	ADEQUATE		INADEQUATE		DONT KNOW	
	No.	%	No.	%	No.	%
Parking	123	82.0	25	16.7	1	0.7
Washrooms	99	66.0	21	14.0	29	19.3
Concession	76	50.6	21	14.0	53	35.3
Picnic shelters	105	70.0	15	10.0	30	20.0
Trails	83	55.3	12	8.0	55	36.7
Barbeques	73	48.7	39	26.0	37	24.7
Picnic tables	106	70.7	34	22.7	10	6.8
Playground	89	59.3	9	6.0	51	34.0
Lake	119	79.3	18	12.0	13	8.7
Lockers	41	27.3	3	2.0	106	70.7
Paddle boats	86	57.3	5	3.3	59	39.3
Playing fields	120	80.0	7	4.7	23	15.3
WINTER RESPONDENTS						
Parking	67	65.7	30	29.4	5	4.9
Washrooms	68	66.7	19	18.6	15	14.7
Concession	50	49.0	46	45.1	6	5.9
Picnic shelters	72	70.6	15	14.7	15	14.7
Trails	56	54.9	11	10.8	35	34.3
Barbeques	47	46.1	28	27.5	27	26.5
The ice	91	89.2	7	6.9	4	3.9
The lockers	33	32.4	20	19.6	49	48.0
Picnic tables	59	57.8	28	27.5	15	14.7

Source: Mayfair Park Questionnaires, 1976-77

Total sample size 252.

summer users. The concession was deemed inadequate by 45 percent of winter and 14 percent of summer visitors. Most visitors who thought it inadequate pointed to factors such as congestion, restricted opening hours, or poor choice of food as their reasons. A lack of parking space was noted by 29 percent of winter and 17 percent of summer visitors.

A significant number of users in both seasons were unaware of the existence of particular facilities. For summer users, the lockers, the paddle boats, the trails and the concession all prompted a large percentage of "dont know" responses. Winter users were similarly unaware of the lockers, the trails and the existence of barbeque facilities. Several respondents stated the need for a sign at the park's entrance providing directions to the facilities. The data appear to support this suggestion.

MAYFAIR PARK FACILITY DEVELOPMENT PRIORITIES

Visitors to the park were asked what facilities, if any, they would like to see in the park. The results are summarized in Table 29. Seventeen percent of summer and 44 percent of winter users answered "none"; that is, they disagreed with any expansion of the present facilities. Winter users appeared to be more sensitive to the issue of crowded facilities. This was indicated by the large percentage of "no further development" responses and, paradoxically, by the higher percentage of visitors seeking an expansion of the pavilion facilities. It was noted during the interviews that park visitors were undecided as to the best method of solving the problem of crowding. Some respondents favoured an end to park development while others thought that increasing the capacity of particular facilities would ease the problem.

TABLE 29

ADDITIONAL FACILITIES - DEVELOPMENT PRIORITIES

FACILITY	SUMMER RESPONDENTS		WINTER RESPONDENTS	
	No.	%	No.	%
Swimming pool	30	20.0	8	7.8
Furniture	11	7.3	10	9.8
More services	11	7.3	8	7.8
Cultural events	11	7.3	6	5.9
Sportsfields	6	4.0	9	8.8
Parking	6	4.0	9	8.8
Another playground	3	2.0	-	-
Washrooms/Changing Rooms/Concession	5	3.3	29	28.4
None	26	17.3	45	44.1
TOTAL	109	-	124	-

Total sample size 252.

Source: Mayfair Park Questionnaires.

A similar question asked in the Park User Survey of 1971 found that most users of major parks in Edmonton wanted additional furniture (63 percent), swimming pools (13 percent), playground equipment (9 percent), restrooms (5 percent), and sportsfields (approximately 5 percent). On the basis of these results it appears that Mayfair Park is better equipped with furniture than most major parks in Edmonton. Development priorities suggested for other facilities show the Mayfair sample corresponding with the results of the 1971 survey.

USERS' DESCRIPTIONS OF MAYFAIR PARK

Data were collected on users' perceptions of Mayfair Park. Closed-ended questions were used for this purpose. Questions related to users' impressions of the size of the park, the landscape, the facilities, and other users of the park. Tables 30 and 31 show the results.

Most users thought the park "large" and "just right" as to size. Winter users differed slightly in their judgments; they thought the park smaller than summer visitors, nearly 15 percent saying it was "too small". Both summer and winter users thought the park "well landscaped", yet a significant percentage indicated that there were "not enough trees" (summer 22.7 percent winter 26.5 percent). According to the visitors, the park was "obviously planned", there was "enough pavement", "enough grass", and the park was "somewhat patrolled", therefore, it was "safe enough".

Divergent perceptions between summer and winter users were recorded for the descriptions of noise, litter and crowding. Sixty-eight percent of winter users indicated that the park was "somewhat noisy" or worse, compared with 47.4 percent of summer users. Winter users described the park as crowded, 88.3 percent responding either "crowded" or "somewhat crowded". Summer users saw the park as less crowded as 34 percent described it as "not crowded". Fifty-six percent of winter users were conscious of the presence of litter as against 39.3 percent of summer visitors. These results indicate that winter users were rather more critical of the park than summer visitors.

TABLE 30

SUMMER VISITORS' DESCRIPTIONS OF MAYFAIR PARK
Percent of Respondents Answering in Each Category Response to Question 23: "Please indicate which words best describe Mayfair Park."

DESCRIPTION			ROW TOTAL
Large	Medium	Small	
64.0	30.7	2.7	97.4
Too big	Just right	Too small	
1.3	83.3	5.3	89.9
Well landscaped	Somewhat	Not landscaped	
82.7	15.3	-	98
Too many trees	Enough	Not enough trees	
-	72.0	22.7	94.7
Too much grass	Enough	Not enough grass	
0.7	94.7	1.3	96.7
Too much pavement	Enough	Not enough	
5.3	88.0	1.3	94.6
Obviously planned	Somewhat	Not planned	
74.4	19.3	-	94.0
Lots of parking	Enough	Not enough	
26.0	55.3	15.3	96.6
Noisy	Somewhat	Quiet	
4.7	42.7	47.3	94.7
Safe	Safe enough	Not safe	
53.3	42.0	1.3	96.7
Littered	Somewhat	Not littered	
3.3	36.0	55.3	94.6
Well patrolled	Somewhat	Not patrolled	
17.3	37.3	38.0	92.6
Crowded	Somewhat	Not crowded	
15.3	46.0	34.0	95.3

Total sample size 150

Source: Mayfair Park Summer Questionnaire 1976

TABLE 31

WINTER VISITORS' DESCRIPTIONS OF MAYFAIR PARK
Percent of Respondents Answering in Each Category: Response to Question 21, "Please indicate which words best describe Mayfair Park."

DESCRIPTION			ROW TOTAL
Large	Medium	Small	
57.8	35.3	2.0	95.1
Too big	Just right	Too small	
-	77.5	14.7	92.2
Well landscaped	Somewhat	Not landscaped	
70.6	24.5	1.0	96.1
Too many trees	Enough	Not enough	
-	63.7	26.5	90.2
Obviously planned	Somewhat	Not planned	
70.6	20.6	2.0	93.1
Noisy	Somewhat	Quiet	
7.8	59.8	24.5	92.2
Safe	Safe enough	Not safe	
43.1	51.0	2.0	96.1
Crowded	Somewhat	Not crowded	
46.1	42.2	5.9	94.1
Well patrolled	Somewhat	Not patrolled	
14.7	45.1	28.4	88.2
Littered	Somewhat	Not littered	
7.8	48.0	37.3	93.1
Lots of parking	Enough	Not enough	
41.2	29.4	23.5	94.1

Total sample size 102

Source: Mayfair Park Winter Questionnaire 1977

Relationships Between Descriptions and Other Variables

Crosstabulations of the descriptive variables with the background characteristics of the respondents were derived in an attempt to show that differing user groups varied in their perceptions of Mayfair Park. The following relationships were observed.

Respondents with children tended to be more tolerant of noise in the park (summer $x^2 = 9.4$, DF = 2, $p < .01$). Family groups were also bothered less by litter and by crowding. Among occupational groups, housewives and white collar workers were sensitive to noise in the park, while blue collar workers were more tolerant. Differing occupational groups showed varying impressions of the size of the park. Blue collar workers thought the park smaller than any other group with 24.1 percent of them answering "too small" to the question on size (summer $x^2 = 28.9$, DF = 10, $p < .01$).

A relationship was observed between the description of the park by a respondent and the reason given for the park visit. As expected, people who came to the park for reasons of retreat were more likely to be bothered by noise and by crowding than those who came for an activity. Sixty-four percent of summer respondents who visited the park to retreat from urban activity described the park as "noisy" or "somewhat noisy". Similarly, 69 percent of these visitors described the park as "crowded" or "somewhat crowded". Respondents who visited the park to retreat were more likely to describe the park as "too small" (summer $x^2 = 14.5$, DF = 6, $p < .05$).

Users' descriptions of the park were shown in several instances to vary according to the sex of the respondent. Women thought the park larger than men (summer $x^2 = 8.6$, DF = 2, $p < .01$). A greater percentage of women thought the park "well landscaped" and "obviously planned". Women were also more likely to describe the park as "quiet" (summer $x^2 = 8.4$, DF = 2, $p < .01$) and were more tolerant of crowding than men. Men, however, were more critical of the parking facilities with 22 percent responding "not enough", compared with 9 percent for women.

Perceptions of the park also varied with the age of the respondent. The older age group saw the park as smaller than the youngest respondents. They also thought the park "well landscaped" in contrast to the youngest age groups who were more likely to describe the park as "somewhat landscaped" (summer, $x^2 = 15.9$, DF = 3, $p < .01$). Those aged 20 - 30 years, and those over 50 were the most sensitive to noise (summer, $x^2 = 16.8$, DF = 3, $p < .01$). The same age groups were observed to be less tolerant of crowds. Older respondents thought the park could be patrolled more often ($x^2 = 20.4$, DF = 6, $p < .01$).

In summary, it appears that winter users were less satisfied with several aspects of the park than summer users. They were more likely to describe the park as noisy, crowded, and littered. They described the park as smaller than summer visitors described it and were less satisfied with the landscape of the park. Seasonal variations in park perceptions do not explain all the variations noted. Respondents with dependent children were less likely to be concerned by noise, crowding and litter.

The reason for the park visit has an affect on users' perceptions. Visitors who want to retreat from urban activities were more sensitive to issues connected with the social carrying capacity of the park. Women and men were found to hold varying perceptions of the park. Women held generally more favourable perceptions of the park's landscape elements. Finally, users' descriptions of the park differed significantly with the age of the respondent.

EFFECTS OF AUTOMOBILES IN MAYFAIR PARK

The Circulation System

Mayfair Park has been designed with the automobile-owning public in mind. Traffic circulates throughout the park via a one-way access road which makes it possible for users to park their vehicles close to the facilities they wish to use. Eighty-five percent of summer visitors and 71.6 percent of winter users were in favour of this arrangement. Many of those who responded in favour, however, qualified their answers (this included 17 percent of the winter sample). Examples of these responses were given by users who answered, "cars detract from the atmosphere, but they are a necessary evil;" or "the system is inconvenient, but it's probably the best one going."

The Presence of Cars

While the one-way traffic arrangement appeared to be convenient for the majority of park users, a number objected to the presence of cars. Some respondents recorded a positive reaction to having vehicles in the park: they noted that a large amount of recreational equipment could be conveyed in their vehicles. Of those who were affected by cars, most recorded negative reactions (see Table 32). Summer respondents complained about noise (9.3 percent), congestion (4.7 percent), and safety factors (2.7 percent). Winter users ranked considerations of safety first among their complaints

(5 percent), while noise and congestion together accounted for 6 percent. The remaining 6 percent of winter respondents affected by cars in the park stated a positive reaction. Two people said the car "allows me access to the park" and another three indicated they would not visit if they were not permitted to bring their cars.

TABLE 32

RESPONDENTS' OPINIONS OF CARS IN MAYFAIR PARK
Response to the Question: "Does the presence of motor vehicles in the park affect you in any way?"

RESPONSE	SUMMER USERS		WINTER USERS	
	No.	%	No.	%
Yes	38	25.3	17	16.7
No	110	73.3	85	83.3
No opinion	2	1.3	-	-
TOTAL	150	99.9	102	100

Source: Mayfair Park Questionnaires 1976-77

LEVELS OF PARK USE

Respondents were asked to indicate if they thought the park suffered from too much use. Table 33 summarizes park visitors' answers to this question.

Users gave differing reasons for indicating that the park was used too heavily. Ten summer respondents (6.7 percent) and 6.9 percent of winter users cited environmental damage to the park as a result of heavy use. Crowding and noise were mentioned by 10 percent of summer and 11.8 percent of winter users. The data show that, for some users, the experience of the park visit is downgraded by the amount of use the park supports.

TABLE 33

USERS' DESCRIPTION OF THE AMOUNT OF USE OF MAYFAIR PARK
Answer to the question: "Does Mayfair Park suffer from too much use?"

RESPONSE	SUMMER USERS No.	SUMMER USERS %	WINTER USERS No.	WINTER USERS % (a)
Yes	25	16.7	26	26.3
No	109	72.7	49	49.5
Don't know	16	10.6	24	24.2
TOTAL	150	100.0	99	100.0

$X^2=14.5$, DF=2, $p < .01$

Source: Mayfair Park Questionnaires 1976-77.

Reactions to Restrictions on Use

Summer and winter park users were next asked if they would accept restrictions on the number of people allowed into the park at any one time. The findings are presented in Table 34.

TABLE 34

USERS' REACTION TO SUGGESTED RESTRICTIONS ON USE
Response to Question: "Would you be prepared to accept restrictions on the number of people allowed into Mayfair Park at any one time?"

RESPONSE	SUMMER USERS No.	SUMMER USERS %	WINTER USERS No.	WINTER USERS % (a)
Yes	44	29.3	18	18.2
No	84	56.0	69	69.7
Don't know	22	14.7	12	12.1
TOTAL	150	100.0	99	100.0

$X^2=5.1$, DF=2, $p > .05$

Source: Mayfair Park Questionnaires 1976-77.

It appears that the previously identified issues of crowding, noise, and environmental damage to the park have led a significant percentage of park users to accept the possibility of restrictions being placed on its availability. Table 34 shows that this proposition would be more readily accepted in the summer than the winter.

THE USE OF OTHER PARKS IN EDMONTON BY VISITORS TO MAYFAIR PARK

Parks in Edmonton

This section of the questionnaire was included to uncover information about the recreational opportunities available to users of Mayfair Park in Edmonton's other major parks.

The Amount of Parkland in Edmonton

Mayfair Park users were asked if Edmonton was well provided with parkland. The answers were recorded in Table 35.

TABLE 35

AMOUNT OF PARKLAND IN EDMONTON
Answer to the Question: "Do you think Edmonton has enough parks?"

RESPONSE	SUMMER USERS No.	SUMMER USERS %	WINTER USERS No.	WINTER USERS %
Yes	62	41.3	23	22.5
No	69	46.0	74	72.5
No opinion	19	12.7	5	5.0
TOTAL	150	100.0	102	100.0

$X^2=17.7$, DF=2, $p < .01$

Source: Mayfair Park Questionnaires 1976-77.

If respondents indicated that Edmonton was deficient in parkland they were asked why they held this opinion. Nearly half the summer users and close to three quarters of winter respondents were in this category. Reasons given for this opinion varied. Twelve percent of all respondents pointed to overcrowding in Mayfair and other parks. An additional 10 percent cited problems concerned with the distribution of existing parkland. Answers such as "not enough downtown, plenty elsewhere," or "other parks too far out of town" and "not enough in my area" (northeast Edmonton) were typical of this category. Population factors were blamed for a shortage of parkland by a further 8 percent of all users. These answers ranged from simple responses like "population growing, we need more parks", to more analytical answers such as "not enough parkland in the new subdivisions where most of the population growth is centred."

Among the other reasons given, there were a number of responses revealing a philosophical or moral attitude towards the provision of parkland in urban areas. Nine percent of all visitors fell into this category. Their answers varied from the tentative, "I'm not sure if a city can ever have enough parks"; to the more assertive, "modern society is too industrialized; it's a sin to destroy open space the way we do". The answers to this question indicated that interviewees valued highly the opportunity to visit parkland in Edmonton.

Respondents' Visits to Other Parks

A surprising number of summer respondents stated that Mayfair was the only park in Edmonton they visited (see Table 36 A). Winter users were more flexible in their recreational habits, only 2.9 percent responding that they never visit other parks. Mayfair visitors were also asked for the names of other city parks they patronized. Table 36 B presents this information.

TABLE 36 A

RESPONDENTS' VISITS TO OTHER CITY PARKS

A. Answer to the Question: "How often do you visit other parks?"

RESPONSE	SUMMER USERS No.	 %	WINTER USERS No.	 %
Often	35	23.3	52	51.0
Seldom	88	58.7	42	41.2
Never	21	14.0	3	2.9
No Response	6	4.0	5	4.9
TOTAL	150	100.0	102	100.0

B. Which parks?

RESPONSE	SUMMER USERS No.	 %	WINTER USERS No.	 %
Emily Murphy	52	30.8	27	24.8
Borden	28	16.6	16	14.7
Laurier	18	10.7	17	15.6
Queen Elizabeth	15	8.9	9	8.3
Victoria	10	5.9	9	8.3
Kinsmen	10	5.9	14	12.8
Whitemud	-	-	13	11.9
All others	36	21.3	4	3.7
TOTAL	169	100.1	109	100.1

Source: Mayfair Park Questionnaires, 1976-77.

Emily Murphy was the park most patronized by users of Mayfair. It was impossible to discern whether this was the case because Emily Murphy was a popular park, or because it was located close to Mayfair and attracted a number of Mayfair users. The remaining parks mentioned by users appeared to attract fewer visitors.

SUMMARY

This chapter was devoted to the analysis of use patterns as reported by visitors to Mayfair Park. Data were analysed under seven major headings: (1) the characteristics of the respondents, (2) measures of accessibility, (3) participation in activities of various types, (4) respondents' reasons for visiting the park, (5) respondents' opinions of the park's facilities, (6) users' perceptions of the design of the park and (7) users' attitudes towards other, similar parks in Edmonton. The questionnaires were on-site and interview-based.

Most park visitors were young adults aged between 20 and 30 years. Middle aged visitors were also well represented but teenagers and the elderly were not. Small groups of between two and four people comprised the majority of visitors though slightly more than a fifth of summer interviewees were alone in the park. These groups were predominantly family groups (39 percent in summer and 61 percent in winter). Females were more likely to have visited the park in a social group; men, especially in summer, often visited alone. Many respondents had dependent children living at home, this was particularly noticeable in winter (55 percent of those interviewed). A particularly significant finding was that over half the interviewees were from medium to high density housing types. The park is obviously important to apartment dwellers.

As indicated in Figure 11 the park appears to be equally accessible to all Edmontonians; however, few respondents came from the extreme northeastern and southeastern parts of the city. From this evidence it is suggested that the CBD and the congested traffic ways surrounding Whyte Avenue act as a barrier to people wishing to travel to Mayfair Park. On the other hand, inner city apartment dwellers, especially those from the medium to high density sectors surrounding Jasper Avenue, are well represented in both winter and summer samples. This supports the evidence presented earlier that the park is an important recreational facility for the inner city resident.

Activity patterns in Mayfair Park are generated by small groups of visitors engaging in a wide variety of both active and passive pursuits. These are generally outlined in Tables 12 to 21. Summer activities reported by the interviewees were predominantly passive in character. Walking, picnicking, driving for pleasure, sunning and relaxing were most popular among summer visitors. Winter activities, in contrast, were more often active pursuits and skating, walking and cross-country skiing were frequently mentioned.

Most visitors intended to stay between one and three hours on the day of the interview with summer respondents remaining longer than winter visitors. Young people stayed longer in the park and showed a slight tendency to visit more often. Travelling time was negatively associated with frequency of visitation and positively associated with the length of stay. Apartment dwellers visited more frequently than did single family home owners.

When users were questioned on their opinions and perceptions of the park, it was generally found that they held positive views towards it and valued the park quite highly. However, it was noted that summer and winter visitors conceptualized the attractions of the park in different ways. Summer respondents liked the retreat-type aspects of the park; they were more aware of the environmental elements of the park (such as the landscaping), and they cited a greater variety of likes than winter interviewees. At variance with this, winter visitors were attracted by specific facilities and rated social interaction more important than summer users.

Summer visitors expressed a wide array of dislikes and no single dislike predominated. Winter visitors, on the other hand were concerned with inadequate facilities and with crowds. Psychological irritations such as noise and the presence of cars bothered summer visitors while winter users were more tolerant of these disturbances. This indicates that the park functions differently in different seasons. In summer it is a retreat from the pressures of urban living while in winter it has a more social function, it is a place where people can get together. This is supported by the reasons people gave for visiting the park on the interview day. Nearly a quarter of the summer users mentioned retreat-type reasons while very few of these were recorded for winter visitors.

It appeared that most visits were prompted by factors external to the park itself. Respondents cited reasons such as the favourable weather, the motivation to relax, the failure to think of anything else to do; they were just "killing time". These results may mean that people generally do not articulate their environmental preferences clearly, or they may have more depressing implications for recreation planners.

Different user groups were found to vary in their perceptions of the park. Respondents with children were more tolerant of noise and were also less bothered by litter and by crowds. Women thought the park larger than men and were more likely to hold positive views of the appearance of the park. Perceptions of park size and appearance also varied significantly with age with the older visitors being somewhat more critical.

The issues of crowding, noise and environmental damage have apparently affected a number of Mayfair visitors. Almost a third of summer visitors would be prepared to accept restrictions being placed on the use of the park. Winter visitors were less affected by crowding though paradoxically they more frequently described the park as "crowded" or "somewhat crowded."

A majority of both summer and winter respondents thought Edmonton was deficient in parkland. The interviewees pointed to overcrowding in existing parks, to problems in the distribution and hence the accessibility of available parks, and to moral-philosophical reasons to justify their opinions.

CHAPTER V

OBSERVATION STUDIES IN MAYFAIR PARK

INTRODUCTION

Visitors to urban parks or similar recreational settings rarely distribute themselves evenly throughout such areas. Variations in the spatial activity patterns of park users can be explained, in part, by peoples' preferences, and in part by the physical characteristics of the particular setting. Observation techniques can be utilized for the identification of spatial patterns of behaviour in recreational areas, yielding valuable information for planners and designers. For example, Coleman and Leonard (1973, pp. 42-48) show how a knowledge of the factors affecting the dispersion of visitors to parks or picnic sites could help determine:

1. The optimum size and location of car parks
2. The location and capacity of roadways and paths
3. The location and capacity of new facilities
4. The provision of information and signposting
5. Landscaping required for a specified pattern of site use (these are considerations of perceptual capacity)
6. The management steps necessary to reduce the pressure on over-used sites
7. The presence or absence of conflicting activities.

The present chapter is devoted to the use patterns observed in Mayfair Park. Use, in this context, means the number of recreationists in the park at a given time, as well as qualitative differences in the way the visitors make use of the park resource. The author has found few studies of recreational use patterns in urban parks that proceed by the technique of observation. Therefore, this chapter begins with a consideration of situations in which observation as a research method is applicable, and continues with a discussion of different types of observer systems that have been used by social scientists in the past. In this way, the present study can be examined in the light of field studies carried out by other workers. It is felt that this approach has merit, if only to detail the wide range of difficulties that were encountered during a study of this type.

OBSERVATION AS A RESEARCH TECHNIQUE IN SOCIAL INVESTIGATION

Definitions

The Concise Oxford Dictionary defines observation as "the accurate watching and noting of phenomena as they occur in nature with regard to cause and effect and mutual relations". Observation then, by definition, is limited to the recording of linguistic signs and physical acts. For other forms of behavioural data (attitudes, motivations, perceptions and expectations, for example) planners and social scientists must look to other research techniques.

Observation has been termed "the classic method of scientific enquiry" (Moser, 1958, p. 166). Many works bear testimony to its useful employment. Herbert Gans' The Levittowners, William Whyte's Street Corner Society, and Robert and Helen Lynd's Middletown are well known examples of detailed studies based fundamentally on observation (Lofland, 1971, p. 7).

An informal history of the social observer would begin in ancient times. Poets and novelists have long been concerned with the precise description of human behaviour and with explaining to their readers the significance of common or uncommon events. Webb et al. (1966, p. 112) introduce their discussion of observation techniques with a lengthy quotation from Dickens' Sketches from Boz well illustrating that novelist's meticulous attention to detail. In fact, it could be argued that most people are skilled in the use of precise observation in areas of importance to them:

> The extensive use of the trained observer is primarily an application in the scientific area of a general skill which most humans have to some degree. The application of this ability to the pursuit of knowledge imposes some refinements and some more rigorous requirements, but no new or occult skill.
>
> (Heyns and Lippitt, 1954, p. 371)

The differences between the observations of laymen, and those of social scientists, lie in the overall purpose of the observations and the types of controls to which they are subjected. Thus, by watching a series of objects and events and reflecting on these observations, social scientists have found it possible to discern patterns and relationships that seem to hold beyond the situational context of the events under investigation. Such observation is not casual everyday awareness, but observation "systematically structured by a specific theoretical or practical problem" (Burch, 1964, p. 2). Observation used in this manner may be defined as "the purposeful and selective watching and counting of phenomena as they take place" (Burton and Cherry, 1970, p. 126). It is in this sense that the term observation is used in this section of the thesis.

The Nature of Observation Studies in the Social Sciences

Observation studies have primarily been used for the investigation of human behaviour in institutions or small communities, although occasionally the community studied has been as large as a small city. The technique however, is not without its limitations. Moser (1958, p. 167) has pointed out that not all research problems that concern social scientists lend themselves to examination by observation. He therefore suggests that three conditions must be satisfied before the method is utilized for the collection of behavioural data.

1. The technique must be suitable for the investigation of the problem in which the researcher is interested.
2. The technique must be appropriate for the populations the researcher wishes to study.
3. The observations must be reliable and objective.

As Moser demonstrates, the observational method presents problems on all of these accounts. To consider the first point, observation is generally unsuited to the investigation of peoples' opinions and beliefs. It would also be unsuitable for the examination of forms of human behaviour normally surrounded by societal taboos; sexual behaviour, for example. With regard to the second point, it would be difficult to determine the leisure time activities of senior citizens in a given community by observation. It would be far easier to survey a representative sample of the elderly residents and generalize the findings to the community as a whole.

The third point requires further explication. It must be remembered that the usual measuring instrument in observation studies is the human observer. Considerable bias may result from the fact that the human observer is a measuring instrument of variable quality. The observer may unknowingly selectively expose himself to the data, or he may selectively perceive them, or, as Webb et al. (1966) point out, he may even shift his system of recording measurements over time. To overcome these and similar problems caused by observer fallibility, observation in the social sciences is often systematic. Systemization of the research procedure involves the design of the data collection procedure so that the observer carefully selects the events and the persons to be recorded and those to be ignored (Burton and Cherry, 1970, p. 129). Time and area sampling, and the creation of classification systems (or typologies), are commonly used procedures that help increase the reliability of observation methods. Reliability refers here to the amount of stability which measures of observation exhibit when repeated under conditions which ensure that only random errors affect this stability (see Peak, 1953, p. 294).

DIFFERENT TYPES OF OBSERVER SYSTEMS

Direct and Indirect Observation

An initial distinction between direct and indirect observation is often made in the literature. Direct observation occurs when a researcher witnesses events at first hand, whereas in indirect observation he relies upon his interpretation of the impressions of others. Further classification into primary sources of information (where data are collected and used by the observer), and secondary sources (where data are gathered by someone other than the observer - for example census reports or newspaper accounts), is occasionally made here (Labovitz and Hagedorn, 1971, pp. 50-63). Indirect observation, using secondary information, occasionally takes place when a researcher analyzes material collected by persons who do not consider themselves scientists. Newspaper reporters, politicians, businessmen and others who record their experiences, often provide social scientists with observations of events. These sources must, however, be used carefully. Newspaper reports often suffer from the lack of distinction between first hand and hearsay observations while personal memoirs and autobiographies are likely to be written with too much reliance on an imperfect memory. Lay observers also tend to dwell on the unique whereas the daily routine events of the same period may go unrecorded. As nonscientists, they are not likely to observe human behaviour in terms of a structured theory. Their comments on the scene before them are likely to be informal and they may omit information of interest to the student of human behaviour.

Despite these drawbacks there are instances were such informal, indirect sources of information have been used to test social theory. Sjoberg and Nett (1968, p. 166) cite the case where Odd Nansen's prison camp diary, From Day to Day, was used to analyse how Nansen sustained himself under conditions of extreme hardship.

Two further methods of indirect observation are the noting of physical trace evidence and the use of mechanical and electronic devices to monitor human behaviour. Physical trace evidence refers to the study of physical traces surviving from past behaviour (Webb, et al. 1966, pp. 350-52). This evidence is commonly used in recreation research to monitor the amount of wear and tear on vegetation in parks and campgrounds, and to study depreciative behaviour and littering in recreational sites (Clark et al. 1971; Clark et al. 1972 ; Clark et al. 1972a). An early example was Bury's (1964) study of California campgrounds where the attributes of the most frequently used campsites were examined to determine campers' preferences for differing sites. In another study, Nixon (1967) recorded vehicle registration plates and noted the equipment being used by visitors to Banff National Park to ascertain users' characteristics and determine their points of origin.

Mechanical and electronic devices may also be used for the recording of human behaviour in various settings. Cameras, both still and cinematographic, tape recorders and electro mechanical counters are among the most frequently used instruments. James and Quinkert (1972) used mechanical traffic counters at the entrance and exit of Wilkerson Pass wayside stop in Pike National Park, Colorado. The traffic counters helped to uncover the amount and timing of use at the site so that the information booth could be staffed at the most effective period of the day.

Still photography and cinematography are little used, yet potentially valuable methods of recording human behaviour. Many studies utilize still photography as illustrative material to support the written word, but the camera is rarely used as a recording and storage device for forms of visual information. Zeck (1972), points out that a major advantage of the photographic record is that it can be re-examined after the event has been recorded. An experiment that followed this procedure was conducted by Pickford and Sandberg (1975). They used motion pictures to study the smoke plumes from forest fires in Bend, Oregon, and found that the method offered them a simple, inexpensive alternative to long hours of observation in the field.

Time lapse cinematography was used by the City of Baltimore, Department of Planning (1972) in a study of patterns of outdoor space usage in the inner city districts of Baltimore. The Madison Presstman playground was filmed from the roof of the C and P telephone building on Madison Street. Five seconds of film were shot every 15 minutes to provide a record of activities taking place in the facility.

Participant and Non-participant Observation

Human observers are either judges or participants (Labovitz and Hagedorn, 1971, p. 50). Judges are detached from the situation and use a set of predetermined categories in which to code events. A well known example is Bales' (1950) category system for the observation of small groups in interaction. His judges often sat behind a one-way mirror and recorded the behaviour of members of small functional groups. Participant observers, on the other hand, are involved in the social setting while recording events. The degree of participation varies considerably, from a distant observer through to taking one of the group roles as a vantage point for observation. Becker (1958) entered into the daily lives of medical school students in a hospital in Kansas City, Missouri, to examine how the students behaved in this institution. Becker and his colleagues went to lectures with the students, frequented the laboratories with them and even followed them to their fraternity houses and listened as the day's experiences were discussed.

Participant observation has several advantages, not the least of which is that the observations can take place in a "natural" setting. The investigator is close to his subjects and can observe their emotional reactions at first hand. For this reason, such studies frequently exhibit an open-ended character and the direction of the study may change during its execution (Campbell, 1970, p. 227). These studies can also be carried out over an extended period of time and can therefore provide extensive information (see Roth, 1963; cited in Phillips, 1966, pp. 142-144).

There are also difficulties associated with the technique of participant observation. The subjects under study may be "sensitized" by the observer's presence, hence their behaviour may be altered (Webb et al. 1966). Another problem is the lack of reliability resulting from the random nature of the investigator's observations. It is unlikely that two participant observers, engaged in a given study, would record the same events in the same way. Activities and events may also be selectively perceived or the role taken on by the participant observer may narrow his range of experience. Lavovitz and Hagedorn (1971, p. 57) illustrate this problem by showing for example, how a bank teller would not have immediate access to the bank's president. There is also the possibility that the observer may become so involved in his role that he loses his objectivity (Lofland, 1971, p. 94). It must be recognized, that despite these problems with participant observation, the majority of observation studies require a degree of participation in practice. Complete detachment or non-participation is nearly impossible. Hence, as Burton and Cherry (1970, p. 128) have concluded, observation usually means quasi-participation.

Simple and Systematic Observation

Simple or uncontrolled observation refers to situations in which the investigator has had no part in structuring the situation

(Webb et al. 1966, p. 138). The observations are more or less random and are often written out longhand and later coded into categories for ease of analysis. Advocates of this position argue that such a system is more likely to lead to the discovery of new theories. Tars and Appleby (1973) carried out exhaustive and random observations on a small child at home, and on the same child in hospital, to determine the effect of institutionalization on the child's behaviour. Their "field" notes were extensive and were subsequently coded into categories for the purposes of chi-square analysis.

Controlled-systematic observation is conducted when the observation process is standardized. Controlled observation infers that there are independent or external checks on the investigator's findings. These controls can take several forms. For example, Bales' (1950) systematic study of small group interaction is a well documented illustration of an attempt to neutralize the effect of the scientist as a variable in the research design. By working out a structured system of behavioural categories Bales, in effect, was training his observers to see certain events in the same way. Another form of control is to have a number of investigators study a particular subject or event. In this way, the effect of the field worker's own socio-cultural background upon his observations would be reduced in part. Or, a scientist may strive to minimize his impact upon a social group under observation. In one such case, Sherif and Sherif (1964) conducted a study of juvenile gangs by having their field workers appear casually on a basketball court and eventually come to know the gang's members without exposing the observer's identity.

Using Structured or Unstructured Observation Techniques

The distinction between more and less structured observational techniques is analagous to the between standardized and non-standardized interview techniques (Phillips, 1966, p. 140). Structured techniques are characterized by the coding of observed events into predetermined categories while less structured techniques develop categories to more or less fit the particular situation. Burton and Cherry (1970, pp. 128-130) state that the various methods of observation outlined in the literature of several disciplines can be reduced to two distinct groups of methods: participant-simple-uncontrolled methods; and non-participant-systematic-controlled methods. The former refer to the less structured techniques, and the latter to the more structured methods.

Considerations of which procedure or set of observational techniques to use requires reflection on several factors. It must be emphasised, however, that each study is unique, and that the practical difficulties encountered along the way will greatly aid in the selection of a suitable technique. The less structured methods are highly suited to the development of hypotheses not formulated when the research was begun. They maximize the opportunities for discovery (Becker and Geer, 1960, p. 269).

In recreation research, these less structured observational methods have occasionally been utilized to develop new theories of recreational behaviour. Burch (1964; 1965) developed an observation schedule on the basis of extensive field testing in campgrounds in Oregon's National Forests. From these tests he was able to identify six differing types of recreational behaviour. They were classified as follows:

1. Symbolic labour - play characterized by the quest for "trophies", eg. fishing.
2. Expressive play
3. Subsistence play - activities related to the demand for food and shelter, eg. doing camp chores.
4. Unstructured Play - activities related to individual creativity and self expression.
5. Structured play - organized play, eg. games.
6. Sociability - activities related to interaction with others.

(cited in Hendee et al. 1971)

Burch was able to advocate the systemization of observations through the use of schedules only after a great number of random observations had been collected and analysed.

In another study of recreational behaviour in campgrounds, Campbell et al. (1968) used unstructured participant observation techniques to identify the types and timing of depreciative acts to campground facilities by campers. Field workers in this study assumed the role of campers. Certain problems were encountered in acting out this role. However, Campbell and his associates concluded that participant observation was the research design most suited to meeting the objectives of their study because people were unwilling to admit to the commission of an illegal act.

Studies of recreational behaviour utilizing observation techniques have tended to favour the more structured procedures. Clarke et al. (1971) used structured observation schedules to study depreciative actions by recreationists in forest campgrounds. The field workers in this study posed as participants as in Campbell et al. (1968), yet the data were systematically collected and recorded in several half hour scheduled observation periods for each day. Cordell and James (1972) combined a variety of research techniques to determine which characteristics of developed campsites were important to users. Structured observations took place on sample days by an observer who walked through the campground under investigation every two hours from 9 a.m. to 9 p.m.. Information on the number of campsites occupied and the size of the party at each site was collected. Dick et al. (1975) selected systematic observation as the most suitable and unobtrusive method to evaluate the effectiveness of interpretive presentations at the Paradise Visitor Centre in Mount Rainier National Park. The observations in this study were controlled to a degree by having two observers record the percentage of an audience paying attention to a presentation. After a little practice, the observers were able to record comparable results consistently.

One particular advantage of the more structured observation techniques is that, once designed, the technique can be repeated in several settings in an attempt to formulate theories about human behaviour that have applicability beyond the situational context in which the observations were carried out. These structured observation procedures are often characterized by the design of observation schedules, category systems and rating scales to facilitate the collection of relevant data. Heyns and Lippitt's (1954) review of systematic observational techniques demonstrates several category systems that have been used in this way (see Heyns, 1948; Steinzor, 1949; Chapple, 1940; Bales, 1950; Carter et al. 1951).

There are several examples of the use of observation schedules in the literature of recreation research. One such example is Love's (1964) study of summer recreational use in campgrounds in the National Forests in Arizona, New Mexico, Colorado, Wyoming, and South Dakota. By rigidly structuring his systems of observations Love was able to replicate his study in several different areas. The method of data collection was standardized so that it would be less difficult to make direct comparisons between the areas observed. A daily use record sheet was derived for use at each of the campgrounds under study. Information was directly recorded on this sheet. The record included information on the times of use and non-use; the number, age and sex of users; the equipment used by visitors; the activities engaged in at the campsite; and the state from which they came. Love's daily use record sheet resembles in several ways the observation schedule derived for use in Mayfair Park.

Fewer systematic observational studies have been performed in the context of urban recreational settings. Jacobs (1973) examined the use of urban open spaces in two communities in Montreal. He attempted to identify daily and weekly cycles of activities in each. Days were divided into five observational periods and ten checkpoints were selected from which to observe activities. Three minute observations were recorded at each of these checkpoints for the five periods of the sample day. Observers at each checkpoint were equipped with schedules on which to record information on 'mobile' and 'stationary' activities (Jacobs, 1973, p. 42). Brower and Williamson (1974) used observation schedules in their investigations of the patterns of outdoor recreation activities in the inner-city residential areas of Baltimore. The schedules were designed to aid observers engaged in drive-around and walking censuses of the study area. Similar methods were used for the investigation of recreational activities in Mayfair Park.

In summary, systematic observation techniques reduce the element of observer bias in any study. Yet there remains the danger that conception may govern perception. In other words, an observer who structures his observations so that they are recorded in a rigidly predetermined code of categories may find that divergent and unexpected data cannot be placed in his structured conceptual system. Thus, the more structured a technique, the less likely the investigator is to discover facts whose existence he had not previously considered (see Becker and Geer, 1960). Just as observers differ in their capacity to observe and record events, observer systems differ in their ability to discover new facets of social phenomena (see Sjoberg and Nett, 1968, p. 180). What is required is a balance between a totally open conceptual scheme and the opposing perspective of an inflexible, unalterable framework.

SAMPLING PROCEDURES FOR OBSERVATIONS IN MAYFAIR PARK

Preliminary Observations

Observations of recreationists in Mayfair Park were begun in January, 1976, and continued until January, 1977. The initial observations were unstructured and exploratory in nature. Notes on the age, sex, and number of participants in differing types of recreational activities were recorded from January to May 1976. Additional information on weather conditions, the timing of the observations and the number of vehicles in the park was also collected during this period.

Several problems were encountered during the initial phases of the observation studies. First, the park was too large to be treated as a single observational unit. Moreover, several parts of the park were heavily wooded and it was impossible to view the whole park from a single vantage point. Several of the park's facilities functioned as activity nodes attracting large numbers of people at various times of the day or week. It was therefore difficult to count the number of people at these activity nodes when these facilities were being used to capacity.

Area Sampling

In an attempt to solve these problems the park was divided into conveniently sized sectors, each sector based on a particular facility or design feature. Some of the resulting sectors were visible from the one-way access road, others were not, and were therefore covered in a walking census. For the summer observations, ten sectors or observational units were created (Figure 12). The winter observations were conducted in a similar manner but the observational units, or park sub-areas, differed in some respects from the summer units (Figure 13). In particular, the lake (the ice), which was much more intensively used in winter than in summer, required division into two observation units, whereas it was treated as a single unit during the summer. Another change involved the omission of the adventure playground in the winter observations. Finally, the trails were treated as one observational sub-area in the winter whereas in the summer they were included as parts of three separate units. These changes were

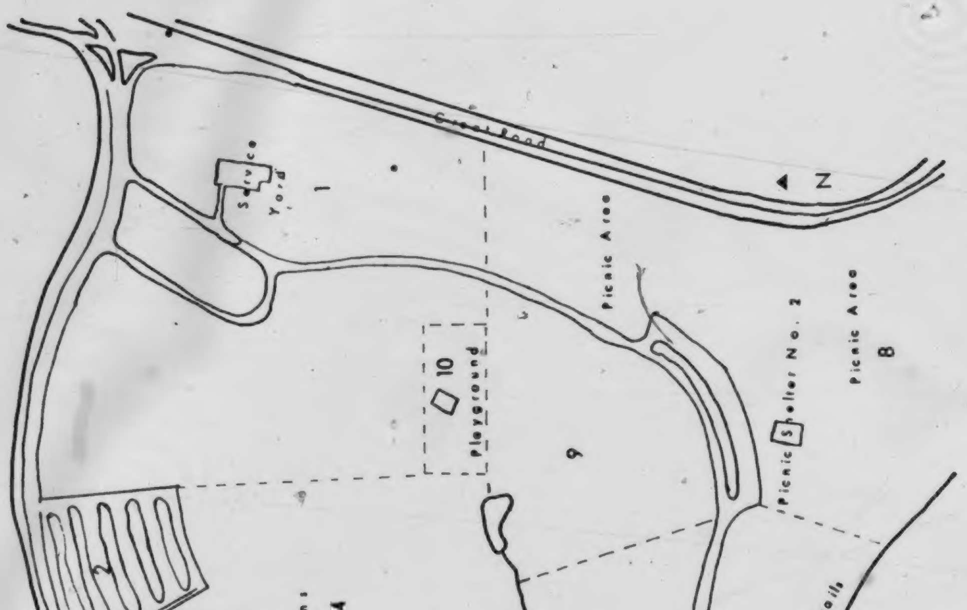
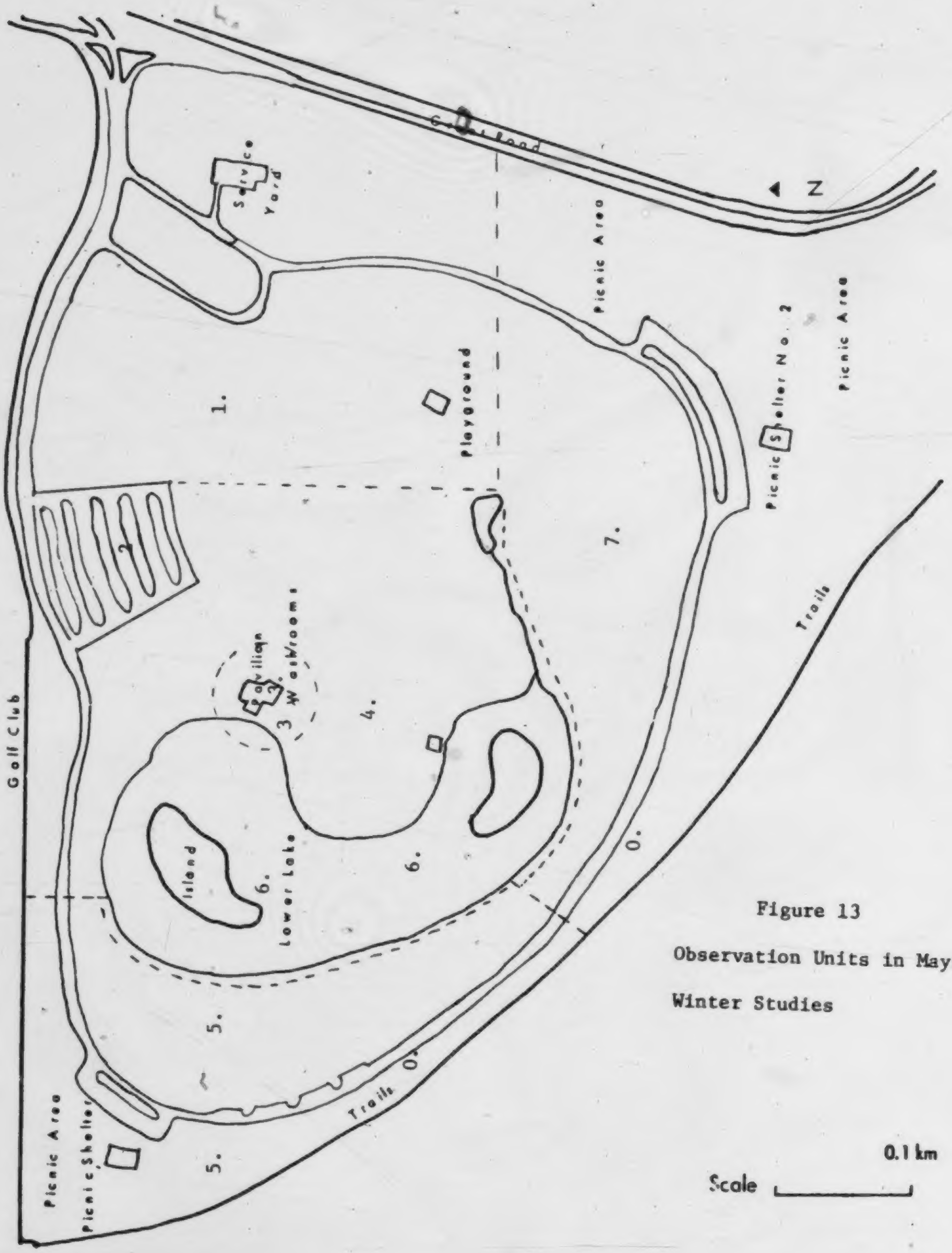

Great Road
N
Service Yard
1
Picnic Area
Playground
10
9
Picnic Shelter No. 2
Picnic Area
8
2
4
Pavilion
Washrooms
3
7
Trails
Golf Club
Island
Lower Lake
6
Trails
Picnic Area
Picnic Shelter
5

Figure 12

Observation Units in Mayfair Park

Summer Studies

Scale 0.1 km


Road
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Service Yard
Picnic Area
Picnic Shelter No. 2
Picnic Area
Playground
1.
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7.
Pavilion
Washrooms
3
4.
Golf Club
Island
Lower Lake
6.
6.
0.
5.
Trails
0.
Trails
5.
Picnic Area
Picnic Shelter
0.1 km
Scale

Figure 13

Observation Units in Mayfair Park

Winter Studies

necessary because of seasonal changes in the use patterns observed in the park. A detailed description of these observational units follows.

Description of Park Sub-Areas for Summer Observations

Area 1.

Area 1. includes the entrance to the park, the access road, and the main service yard where the maintenance staff and their equipment are located. It is predominantly an open, flat, grassed section of the park with some ornamental shrubs and flower beds. This area borders the Mayfair Club, a private golf course developed on 185 acres of land leased from the City of Edmonton.

Area 2.

Observation unit 2 is based on the main parking lot. It is located close to the pavilion, the lake, and the proposed swimming facility. The parking lot has been designed to provide space for a maximum of 240 cars. At times of peak use the process of data collection was made difficult by the almost continual movement of people and traffic in this area. For this reason, the parking lot, though small in size in relation to other park sub-areas, was treated as a separate observation unit.

Area 3.

Sub-area 3 is centred on the pavilion, but also includes the lake and the smaller building which housed the concession responsible for the renting of the paddle boats. The main pavilion contains a refreshments concession, lockers and washroom facilities. This observation unit is wholly visible from the pavilion.

PLATE 1

Summer Observation Unit 1: the Mayfair Park service yard

PLATE 2

Summer Observation Unit 2: the main parking lot

PLATE 3

Summer Observation Unit 3: the Pavilion

PLATE 4

Summer Observation Unit 4

Area 4.

Observation unit 4 is similar to unit 1 in that it is mainly an open, grassy area with few trees. It is the largest of the observation units in the summer study and, while it is possible to observe the whole of sub-area 4 from a single vantage point, a degree of walking was often necessary, particularly on crowded days.

Area 5.

Observation unit 5 contains a variety of vegetation types. Wooded and secluded areas are mixed with grassy, open spaces. The river valley trail system is accessible from this park sector and views of the North Saskatchewan River are possible. Facilities include the picnic shelter No. 1, a large building housing washrooms, and a parking bay with space for 54 vehicles, and a number of barbeque stoves and picnic tables.

Area 6.

Sub-area 6 is similar to area 5 in that it is comprised of a mixture of heavily wooded enclaves and grassy, open spaces. The more open expanses are on the lake side, and this unit is separated from area 5 by the access roadway encircling the park. Facilities in this unit are barbeque stoves and picnic tables. The lake shoreline is graded, and from this graded slope it is possible to view the majority of the park, as well as the immediate passing scene.

Area 7.

This observation unit is a continuation of area 6 yet is generally more open with fewer private and wooded areas. A walking trail and free play areas are the major facilities in this sector. The main park trail also cuts through observation unit 7.

PLATE 5

Summer Observation Unit 5

PLATE 6

Summer Observation Unit 6: the lakeshore

PLATE 7

Summer Observation Unit 8

PLATE 8

Summer Observation Unit 9: the playing fields

Area 8.

Area 8 is one of the more private areas of the park. It is a heavily wooded sector, much of it resembling the natural vegetation of the river valley. The main park trail cuts through this sector, and it is possible to gain expansive views of the river and southwestern Edmonton from vantage points along it. This sector has parking facilities for 128 cars, the picnic shelter No. 2 building which includes washrooms, and, on the grassed areas, a number of picnic tables and barbeque stoves are scattered at random.

Area 9.

Observation unit 9 is the most open, and grassed sector of the park. In the northwestern corner of this unit is a small ornamental pond.

Area 10.

Area 10 consists of the children's adventure playground and its immediate surrounds. A small building containing washrooms is located adjacent to the playground. There are also a number of stoves and picnic benches in this sub-area of the park.

Winter Modifications to the Observation Units

Park sectors 1, 2 and 4 remained the same for the summer and winter observations. Some changes were made to the other five park sectors to facilitiate the winter observation studies. The major change involved the division of the lake (the ice), which was formerly treated as observation unit 3, into 2 sectors, 6a and 6b. This was made necessary by the large number of skaters seen on the ice at various times. Statistics from these two units were combined for the purposes of analysis because patterns of use were closely related. In

PLATE 9

Summer Observation Unit 10: the children's adventure playground

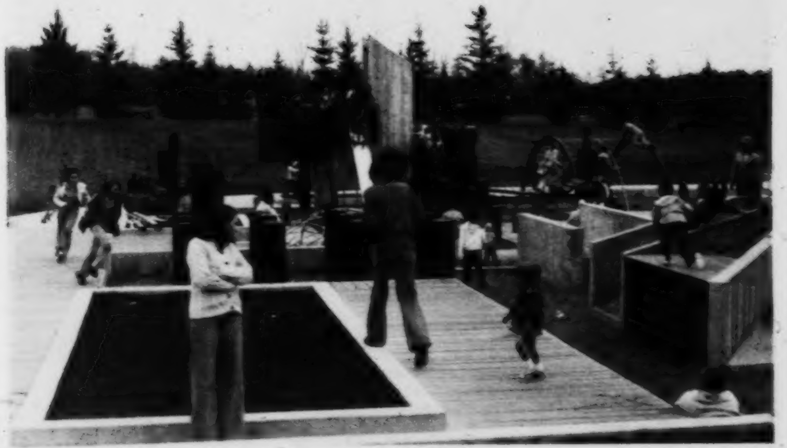


PLATE 10

Winter Observation Unit 6: the ice for social skating

PLATE 11

Winter Observation Unit 0: the main park trail the winter studies observation unit 3 was therefore restricted to the pavilion and its immediate surroundings.

Sector 5 was enlarged to include that part of the park previously identified as sector 6. Similarly, sectors 7, 8 and 9 were amalgamated. The final change for the winter observations was that the river valley trail became a separate observation unit, whereas in the summer studies it had formed the southern-most section of areas 5, 7 and 8. This winter sector was termed area 0.

Thus, in winter, the park was divided into fewer sectors than were created for the summer studies. In all there were eight winter sectors, with one sector (number 6), divided into two units.

Time Sampling

Use patterns in Mayfair Park exhibited considerable seasonal and temporal variation. Observation procedures allowed for these variations. Summer observations began on May 2, 1976, and continued until August 30; winter observations covered the period from January 1 to February 8, 1977. Thirty-six days were selected for data collection in the summer and 16 in the winter. Sample days included 13 weekend days, 7 of these in the summer, and 39 weekdays, 10 of which were winter weekdays. Observations began at 9 a.m. and ceased at 9 p.m. Counts were taken every two hours.

DATA COLLECTION PROCEDURES

Observations were structured in the sense that the park was systematically observed. It was found during the period of initial observations that the activity patterns of visitors were complex. This created difficulties as it was not possible to write down in longhand a description of what was happening in each observation unit at a given time. There were too many visitors engaged in too many activities to record in this manner. Thus, an observation schedule was derived to aid the process of data collection.

The observation schedule resembled in form the schedule designed by Burch (1964) for use in forest campgrounds in Oregon. Burch's schedule was described as a "role segregation-allocation schedule" (1964, p. 6) and was used as a means of determining which recreational activities were more characteristic of men or women, of children or adults, and which activities were shared. A copy of Burch's role segregation-allocation schedule is included as Appendix A.

Modifications were made to Burch's schedule to allow for the different types of activities likely to be encountered in the setting of a large urban park. First, an activity checklist was designed for Mayfair Park on the basis of preliminary observations. Twenty different activities were arranged in rows at the left hand margin of the summer observation sheet. Five spaces were left blank for the inclusion of activities noticed subsequent to the preliminary field test. The winter activity checklist was created in the same manner. Column variables reflected the characteristics of park visitors for each of the activities observed (see Figures 14 and 15).

One printed sheet or schedule was used for each park sector On each sheet the following information was noted:

1. the range of recreational activities at a given park sector;
2. the number of participants observed for each of these activities;

Figure 14

SUMMER OBSERVATION SCHEDULE

Weather ______________________

____

SECTOR: __________

DATE: __________

TIME: __________

ACTIVITY	GROUP SEX COMPOSITION					AGE					
	MALE	F	MIXED M	MIXED F		CHILD	TEEN	ADULT	MIXED C	MIXED T	MIXED ADULT
GAMES 1. Frisbee											
2. Catch											
3. Football											
4. Baseball											
Others (specify)											
5.											
6.											
7.											
8.											
OTHER ACTIVITIES 1. Walking											
2. Jogging											
3. Bicycling											
4. Dog Walking											
5. Driving											
6. Boating											
7. Fishing											
8. Horseriding											
1. BBQ Activity											
2. Picnicking											
3. Photography											
4. Nature Study											
5. Relaxing											
6. Reading											
7. Outdoor Educn.											
8. Sunbathe											

Figure 15

WINTER OBSERVATION SCHEDULE

Weather ______________________ SECTOR: __________

______________________ DATE: __________

TIME: __________

	GROUP SEX COMPOSITION				AGE					
ACTIVITY	MALE	F	MIXED		CHILD	TEEN	ADULT	MIXED		
			M	F				C	T	ADULT
GAMES 1. Hockey										
2.										
3.										
4. Others										
5.										
6.										
7.										
OTHER ACTIVITIES 1. Walking										
2. Jogging										
3. Walking a Dog										
4. Driving										
5. Sitting										
6. Photography										
7. Skating										
8. Snowshoeing										
9. Tobogganing										
10. X-C Skiing										
11. Barbequing										
12. Picnicking										
Others (specify)										
13.										
14.										

NOTES

3. the age and sex composition of each participant;
4. the group composition of park visitors;
5. weather conditions, the date and the timing of the observations.

Observations were recorded on each sheet by placing a mark or a number where the appropriate row (activity) and column (visitor description) intersected. This procedure was identical to that followed by Burch (1964, pp. 7-8). To choose an example from Figure 15, if a group of four males was observed fishing, and two appeared to be teenagers and two were adults, the observer would follow the row "fishing" across to the "all male" column and place a "4" in the appropriate square. Next, he would continue across the row to the "teenager" column where a 2 would be placed and follow this by placing a 2 in the "adult" column. The same procedure would be followed for all observed activities in the park sector under observation.

Despite the standardization of observation procedures, some problems were encountered during the data collection process. One such problem was determining the sex of very young children, especially in the winter when the children were heavily clothed. On those occasions when the sex of the child was unknown, the observer ignored the "group sex composition" columns of the schedule and proceeded directly to the "age" columns. Another difficulty with date collection presented itself on days when the park was very crowded. It was almost impossible to determine group size and composition where a great number of park visitors were crowded into a small park space. A particularly difficult time was had counting groups in the children's adventure playground and in the pavilion during the winter. On these occasions it was possible only to record the activities and the number and sex of participants. Winter observations of the activity skating were also especially difficult. Not only were there a great many people on the ice at certain times, but the skaters were often moving very rapidly. As a result, the estimates of the number of skaters on very busy days are subject to a degree of error.

Data were collected by walking or driving through the park on a predetermined route. Driving censuses were suitable for days when the park was sparsely populated, yet there remained the problem of some park sectors not being completely visible from the roadway. It was ultimately decided that a walking census was the most suitable method of data collection.

Upon arrival at the park entrance, the observer noted the time, date and weather conditions, and then began to record observed activities. Observations began each morning in park sector No. 1, and a more or less circular route was followed until all sectors had been viewed. Each sector was under observation for a five minute time period. In this manner, it took approximately 50 minutes to complete a circuit of the park, leaving a little more than an hour free for reflection until the next park circuit.

Webb et al. (1966) have cautioned that the patently visible observer can produce changes in the behaviour of people under observation. During the pre-tests this 'guinea pig' effect was noticed on two occasions. The presence of a clipboard and a pencil prompted several inquisitive people to ask questions on the nature of the research being carried out. It was felt that the observer should be as unobtrusive as possible. For this reason, the observer dressed casually, in the manner of visitors to the park, and occasionally engaged in recreational activities such as picnicking or sunbathing. The observer was, to all intents and purposes, another park visitor.

RESULTS OF WALKING CENSUSES: USE PATTERNS IN MAYFAIR PARK

Park Sectors and Summer Activities

Summer activities, as determined by the observation studies, are presented in Tables 37-57 which describe the use patterns at each of the ten park sectors previously defined as summer observation units. All observed activities were recorded on the observation schedules and tallied at the completion of the sampling period. The sums of all park users observed on all counts were then divided by the number of counts, which varied from a low of 38 in park sectors 7 and 9, to a high of 54 in sectors 1, 2 and 3.

To overcome possible bias in the interpretation of observations derived from differing numbers of activity counts, the data were averaged. In other words, Tables 38-57 indicate the number of people seen during an average walking census by park sector, age group, major activity observed, and sex. In this way, qualitiative and quantitative differences in the use patterns of different parts of Mayfair Park can be readily identified.

During the period of the summer observation studies a total number of 21,463 visitors were counted in Mayfair Park. Table 37 shows how these visitors were distributed amongst the ten park sectors. Sector 9, which was the open, grassy area in the south-eastern corner of the park, was the least used sector, accounting for less than 4 percent of the total number of visitors. By way of contrast, sectors

4 and 6 were heavily patronized by summer visitors, accounting for 16.2 and 15.4 percent of users respectively. Sub-area 4 recorded the highest average number of users per observational period (66.7 visitors), while sector 9 recorded the lowest (20.0). The most intensive use was observed in sector ten, the adventure playground and its immediate surroundings. This observation unit was by far the smallest of the sub-areas yet recorded an average of 57.2 users per observation period. Moreover, nearly 14 percent of all summer users counted were observed within the playground, which therefore performs an important function in the generation of summer use patterns in Mayfair Park.

TABLE 37

DISTRIBUTION OF SUMMER VISITORS TO MAYFAIR PARK BY PARK SECTORS

Park Sector	N. of Observations	Total N. of People Observed	Average N. of People Observed per count	Percentage of Park Total
1	54	1980	36.7	9.2
2	54	1449	26.8	6.8
3	54	2042	37.8	9.5
4	52	3467	66.7	16.2
5	50	2243	44.9	10.5
6	52	3311	63.7	15.4
7	38	1556	40.9	7.2
8	52	1698	32.7	7.9
9	38	759	20.0	3.5
10	52	2972	57.2	13.8
TOTAL	496	21,463	-	100.0

Source: Summer observations

INDIVIDUAL OBSERVATION SITES

Sector 1.

This site recorded a moderate amount of use. A total of 1980 visitors were counted during 54 observation periods for an average of 36.7 persons per observation. Fifty-eight percent of visitors were adults and less than a quarter were children. Seventeen percent were teenagers. Observations indicated that the sector was used by nearly equal numbers of men and women, but that men were more likely to pursue the more vigorous activities (55 percent, compared with 45 percent for women).

A total of eight 'active' and eight 'passive' pursuits was identified in sector 1. Excluding the activity driving, walking was the most popular pastime, accounting for an average of nearly twelve people each time this sub-area was observed. Of the other activities recorded, park maintenance (activities related to the upkeep of the park such as grass cutting, weeding and collecting litter) was more often seen in this area than in any other park sector. This is obviously due to the location of the Service Yard in this corner of the park. Kite flying was another activity predominantly observed in this grassy, treeless sector. A majority of recreationists observed in sector 1 was engaged in active pursuits (68.2 percent); this relationship was found to hold for all age groups.

On weekends, this part of the park appears to function as a spillover parking area for the main parking lot. A total of 402 parked cars was recorded on 44 weekday observations, an average of 9.1 cars each count. In contrast, ten weekend counts returned a total of 442 cars, or 44.2 parked cars per count. The highest total was recorded on Sunday July 25, when 98 cars were parked, many of them illegally. Because this part of the park is close to the main parking lot, visitors who had unsuccessfully attempted to park there, would often choose this area as the closest available substitute. In addition, parking from the nearby adventure playground often spills over into this area. The data show that retreat-type activities such as sunbathing, reading and picnicking were not very popular in this part of the park, perhaps because of the problems caused by the large number of cars.

Tables 38 and 39 present the data from sector 1. The following points of clarification should be made:

1. "Sporting games" include the activities football, baseball, catch, volleyball, badminton and tennis, all of which were observed within the park.

2. "Relaxing" includes casual, passive activities such as sleeping, sitting, talking, or watching the passing scene. It was distinguished from sunbathing and reading.

3. Statistics for the activity "driving" were deduced by counting the number of cars passing through an observation unit during a five minute period and multiplying this number by 3. An average of three persons per vehicle was assumed. This procedure was adopted due to the difficulty of identifying the number and characteristics of occupants of passing vehicles.

4. "Barbeque activity" refers to people observed cooking or preparing to cook. It was distinguished from picnicking where no cooking activity was noticed.

TABLE 38

SUMMER ACTIVITIES BY AGE GROUPS IN SECTOR 1

Activity Active	Children N	 %	Teens N	 %	Adults N	 %	Total N
Walking	4.15	35.9	2.43	21.0	4.98	43.1	11.56
Park Maintenance	-	-	-	-	1.72	100.0	1.72
Bicycling	0.11	11.6	0.28	29.5	0.56	58.9	0.95
Frisbee	0.11	15.1	0.16	21.9	0.46	63.0	0.73
Sporting Games	0.09	15.0	0.07	11.7	0.44	73.3	0.60
Jogging	-	-	0.03	6.5	0.43	93.5	0.46
Kite Flying	0.03	10.0	0.24	80.0	0.03	10.0	0.30
Dog Walking	-	-	-	-	0.03	100.0	0.03
Total Active	4.49	27.5	3.21	19.6	8.65	52.9	16.35
Passive	N	%	N	%	N	%	N
Driving	-	-	-	-	-	-	12.67
Picnicking	1.26	30.4	0.54	13.0	2.35	56.6	4.15
Sunbathing	0.09	5.0	0.13	7.3	1.57	87.7	1.79
BBQ Activity	0.11	18.6	0.05	8.5	0.43	72.9	0.59
Relaxing	-	-	0.05	9.4	0.48	90.6	0.53
Sitting in Car	-	-	0.07	17.5	0.33	82.5	0.40
Reading	-	-	-	-	0.11	100.0	0.11
Beerdrinking	-	-	-	-	0.07	100.0	0.07
Total Passive	1.46	19.1	0.84	11.0	5.34	69.9	7.64
TOTAL	5.95	24.8	4.05	16.9	13.99	58.3	23.99
							36.66*

Source: Summer observations

N of observations = 54

*Includes figures for activity 'driving'

TABLE 39

SUMMER ACTIVITIES AND SEX OF PARTICIPANTS IN SECTOR 1

ACTIVITY	SEX OF PARTICIPANT				
	Male		Female		Total
Active	N	%	N	%	N
Walking	5.44	47.1	6.12	52.9	11.56
Park Maintenance	0.96	55.8	0.76	44.2	1.72
Bicycling	0.77	81.1	0.18	18.9	0.95
Frisbee	0.56	76.7	0.17	23.3	0.73
Sporting Games	0.52	86.7	0.08	13.3	0.60
Jogging	0.44	95.7	0.02	4.3	0.46
Kite Flying	0.27	90.0	0.03	10.0	0.30
Dog Walking	0.03	100.0	-	-	0.03
Total Active	8.99	55.0	7.36	45.0	16.35
Passive	N	%	N	%	N
Driving	-	-	-	-	12.67
Picnicking	1.67	40.2	2.48	59.8	4.15
Sunbathing	0.83	46.4	0.96	53.6	1.79
BBQ Activity	0.27	45.8	0.32	54.2	0.59
Relaxing	0.24	45.3	0.29	54.7	0.53
Sitting in Car	0.20	50.0	0.20	50.0	0.40
Reading	0.06	54.5	0.05	45.5	0.11
Beerdrinking	0.07	100.0	-	-	0.07
Total Passive	3.34	43.7	4.30	56.3	7.64
TOTAL	12.33	51.4	11.66	48.6	23.99
					36.66*

Source: Summer Observations

N of observations = 54

*Includes figures for activity 'driving'

Sector 2

Sector 2 is the main parking lot for Mayfair Park. It is a facility with a highly specialized function, yet a surprising number of recreational activities occur within its confines. People were often seen bicycling, throwing a frisbee, and even picnicking and sunbathing in the parking lot. As expected, the most commonly observed activity was driving, and yet driving accounted for less than 40 percent of the total activity observed. Walking, with 28.2 percent, was the second most recorded activity while picnicking, sunbathing, and sitting in cars, together accounted for a further 25 percent.

Activities classified as 'active' were noted more often than 'passive' activities (53.3 percent compared with 46.7 percent) as a majority of people observed in this sector were in transit to, or from, another part of the park.

The main parking lot is designed to provide parking for 240 vehicles. On five occasions the lot was observed to be at full capacity, and on three counts it was seen to be beyond this level, with a high recorded at 1:55 p.m. on Sunday, July 25 of 256 vehicles. A marked peaking on weekends was observed to be characteristic of the use of this area. The weekday average of 8.5 vehicles parked during each observation period contrasted greatly with the average of 98.8 on weekends. For most of the week the parking lot is little used while on weekends it is often used at more than full capacity. This marked pattern of weekend peaking presents a design challenge to planners in that any increase in the size of the parking facility to accommodate the larger amounts of weekend use would result in further under-utilization of the facility for the remainder of the week and would undoubtedly have deleterious effects on the environment of the park.

Tables 40 and 41 present the data from observations of sector 2.

TABLE 40

SUMMER ACTIVITIES BY AGE GROUPS IN SECTOR 2

ACTIVITY	AGE GROUPS						
	Children		Teens		Adults		Total
Active	N	%	N	%	N	%	N
Walking	0.83	10.9	0.44	5.8	6.31	83.3	7.58
Bicycling	0.06	13.3	0.13	28.9	0.26	57.8	0.45
Park Maintenance	-	-	-	-	0.26	100.0	0.26
Frisbee	-	-	0.09	40.9	0.13	59.1	0.22
Sporting Games	-	-	0.04	21.1	0.15	78.9	0.19
Total Active	0.89	10.2	0.70	8.0	7.11	81.8	8.70
Passive	N	%	N	%	N	%	N
Driving	-	-	-	-	-	-	10.50
Picnicking	0.85	31.8	0.31	11.6	1.51	56.6	2.67
Sunbathing	-	-	0.09	4.3	2.0	95.7	2.09
Sitting in Car	0.43	22.3	0.31	16.1	1.19	61.6	1.93
Relaxing	0.06	14.0	0.06	14.0	0.31	72.0	0.43
BBQ	0.07	22.6	-	-	0.24	78.4	0.31
Reading	-	-	-	-	0.20	100.0	0.20
Total Passive	1.41	18.5	0.77	10.1	5.45	71.4	7.63
TOTAL	2.30	14.1	1.47	9.0	12.56	76.9	16.33
							26.83*

Source: Summer observations

N of observations = 54

*Includes figures for activity 'driving'

TABLE 41

SUMMER ACTIVITIES AND SEX OF PARTICIPANTS IN SECTOR 2

ACTIVITY	SEX OF PARTICIPANT				
	Male		Female		Total
Active	N	%	N	%	N
Walking	5.15	67.9	2.43	32.1	7.58
Bicycling	0.24	53.3	0.21	46.7	0.45
Park Maintenance	0.26	100.0	-	-	0.26
Frisbee	0.13	59.1	0.09	40.9	0.22
Sporting Games	0.17	89.5	0.02	10.5	0.19
Total Active	5.95	68.4	2.75	31.6	8.70
Passive	N	%	N	%	N
Driving	-	-	-	-	10.50
Picnicking	1.28	47.9	1.39	52.1	2.67
Sunbathing	1.04	51.2	0.99	48.8	2.03
Sitting in Car	1.06	53.5	0.92	46.5	1.98
Relaxing	0.19	44.2	0.24	55.8	0.43
BBQ Activity	0.17	54.8	0.14	43.2	0.31
Reading	0.07	35.0	0.13	65.0	0.20
Total Passive	3.82	50.1	3.81	49.9	7.63
TOTAL	9.77	59.8	6.56	40.2	16.33
					26.83*

Source: Summer observations

N of observations = 54

*Includes figures for activity 'driving'

Sector 3

Sector 3 has a diversified environment including a man-made lake and several specialized facilities, notably a pavilion containing washrooms, lockers, and a refreshments concession. A boat house is located on the eastern shore of the lake and from this building a paddle boat concession is operated. A wooden boardwalk or promenade runs along the eastern shore of the lake connecting the pavilion with the boat house.

In this part of the park passive-type activities were seen to be the most popular for teenagers and adults while children favoured the more active pursuits. In general terms, passive activities accounted for a greater percentage of the overall use (53.2 percent) of this sector. The majority of visitors seen in this part of the park were males (53.3 percent) and men were also more likely to be observed while engaged in active pursuits (55.6 percent compared with 41.4 percent women).

Some activities, such as paddle boating, sitting outside the pavilion, buying food at the concession, and buying tickets at the boathouse, were observed only in this sector of the park. Together these activities accounted for over half (58.2 percent) of the total use of this sector. The data suggest that sector 3 provides specialized functions within the park and that the more general park activities such as sunbathing, picnicking and relaxing, are more likely to be observed elsewhere.

Children were the most frequently counted participants in the activities fishing (88.1 percent), paddle boating (67.6 percent), outdoor education (61.2 percent) and bicycling (56.5 percent).

Adults formed the majority of visitors observed walking a dog (100 percent), sunbathing (71.4 percent), picnicking (64.7 percent), and watching the paddle boats (59 percent). Teenagers were, on the whole underrepresented in this sector of the park. Tables 42 and 43 summarize the data from sector 3.

Sector 4

Sub-area 4 comprises the central section of Mayfair Park and lies between the eastern shore of the lake and the main parking lot. Flat grassed areas allow for active 'free play' pursuits while areas of ornamental plantings surrounding the upper lake encourage retreat-type activities. It is the largest summer observation unit in this study and, perhaps consequently, the data show that more park users were recorded here than in any other sector.

The open, flat nature of this observation unit appears to encourage a great range of recreational activities; in all, twenty such activities were found to have a noteworthy number of participants. Among the more active pastimes, walking, sporting games and throwing a frisbee were popular, while picnicking, sunbathing, fishing and relaxing were the more frequently observed passive pursuits. Teenagers and adults were more often recorded as participants in active pastimes whereas children favoured passive activities. Children dominated participation in activities such as fishing (61.7 percent), wading in the lake (91.3 percent), and outdoor education (77.9 percent). Teenagers were seen to engage in calisthenics associated with jogging activity (66.7 percent), and also in bicycling (51.8 percent). Adults observed in this area could often be seen reading (90.5 percent), jogging (88.6 percent), sunbathing (70.2 percent) and drinking beer (69

TABLE 42

SUMMER ACTIVITIES BY AGE GROUPS IN SECTOR 3

ACTIVITY	AGE GROUPS						
	Children		Teens		Adults		Total
Active	N	%	N	%	N	%	N
Walking	4.13	37.3	1.91	17.3	5.02	45.4	11.06
Paddle Boating	4.0	67.7	0.89	15.1	1.02	17.2	5.91
Bicycling	0.13	56.5	0.06	26.1	0.04	17.4	0.23
Dog Walking	-	-	-	-	0.31	100.0	0.31
Frisbee	-	-	0.04	36.4	0.07	63.6	0.11
Park Maintenance	-	-	-	-	0.07	100.0	0.07
Total Active	8.26	46.7	2.90	16.4	6.53	36.9	17.69
Passive	N	%	N	%	N	%	N
Sitting inside Pavilion	1.89	26.7	1.52	21.5	3.67	51.8	7.08
Buying Food	1.24	25.9	0.89	18.6	2.65	55.5	4.78
Buying Boat Tickets	1.35	46.2	0.46	15.8	1.11	38.0	2.92
Watching Boats	0.43	23.2	0.33	17.8	1.09	59.0	1.85
Sunbathing	-	-	0.24	29.6	0.57	71.4	0.81
Relaxing	0.28	40.6	0.04	5.8	0.37	53.6	0.69
Fishing	0.59	88.1	0.06	9.0	0.02	2.9	0.67
Outdoor Educa.	0.41	61.2	0.15	22.4	0.11	16.4	0.67
Feeding Ducks	0.06	18.8	0.07	21.9	0.19	59.3	0.32
Picnicking	0.04	23.5	0.02	11.8	0.11	64.7	0.17
Lovemaking	-	-	-	-	0.08	100.0	0.08
Reading	-	-	-	-	0.07	100.0	0.07
Total Passive	6.29	31.3	3.78	18.8	10.04	49.9	20.12
TOTAL	14.55	38.5	6.68	17.7	16.57	43.8	37.81

Source: Summer observations

N of observations = 54

Outdoor Education refers to a nature study program organized by the City of Edmonton Parks and Recreation Department.

TABLE 43

SUMMER ACTIVITIES AND SEX OF PARTICIPANTS IN SECTOR 3

ACTIVITY	SEX OF PARTICIPANT				
	Male		Female		Total
Active	N	%	N	%	N
Walking	5.69	51.4	5.37	48.6	11.06
Paddle Boating	3.67	62.1	2.24	37.9	5.91
Bicycling	0.15	65.2	0.08	34.8	0.23
Dog Walking	0.19	61.3	0.12	38.7	0.31
Frisbee	0.06	54.5	0.05	45.5	0.11
Park Maintenance	0.07	100.0	-	-	0.07
Total Active	9.83	55.6	7.86	44.4	17.69
Passive	N	%	N	%	N
Sitting Inside Pavilion	3.35	47.3	3.73	52.7	7.08
Buying Food	2.53	52.9	2.25	47.1	4.78
Buying Boat Tickets	1.59	54.5	1.33	45.5	2.92
Watching Boats	0.89	48.1	0.96	51.9	1.85
Sunbathing	0.44	54.3	0.37	45.7	0.81
Relaxing	0.31	44.9	0.38	55.1	0.69
Fishing	0.57	85.1	0.10	14.9	0.67
Outdoor Educa.	0.35	52.2	0.32	47.8	0.67
Feeding Ducks	0.15	46.9	0.17	53.1	0.32
Picnicking	0.06	35.3	0.11	64.7	0.17
Lovemaking	0.04	50.0	0.04	50.0	0.08
Reading	0.03	42.9	0.04	57.1	0.07
Total Passive	10.31	51.2	9.91	48.8	20.12
TOTAL	20.14	53.3	17.77	46.7	37.81

Source: Summer observations

N of observations = 54

percent).

Men were more often observed in this part of the park than women both in active pursuits (60.7 percent) and in the more passive activities (52.4 percent). Men dominated participation in activities such as park maintenance (100 percent), jogging (92.9 percent), fishing (77 percent) and wading in the lake (82.6 percent); while women were seen to favour sunbathing (55.2 percent), picnicking (52.9 percent) and relaxing (52.4 percent).

This park sector does not appear to have the problems associated with parking congestion noted in areas 1 and 2. Counts of parked vehicles during the week revealed an average of 7.3 cars per observation period (334 vehicles in 46 counts). Weekend counts recorded a somewhat higher average of 19.9 vehicles (159 cars in 8 counts). A certain degree of congestion was observed, however, as there are no parking bays in this sector and all parking is on the roadside. On Sunday, July 25, at 2 p.m., 59 cars were counted parked on the access roadway in this park sector. A park visitor who was engaged in conversation reported that the short journey from the park entrance to this observation unit (less than one kilometre) had taken him more than 30 minutes.

Tables 44 and 45 summarize the data generated by observations in sector 4.

Sector 5

This part of Mayfair Park is located in the extreme northwestern corner. It is bounded on the east by the roadway, on the west by the North Saskatchewan River, and on the north by the Mayfair Golf and Country Club. It is one of the more heavily forested parts of the

TABLE 44

SUMMER ACTIVITIES BY AGE GROUPS IN SECTOR 4

ACTIVITY	AGE GROUPS						
	Children		Teens		Adults		Total
Active	N	%	N	%	N	%	N
Walking	4.06	31.4	3.06	23.7	5.81	44.9	12.93
Sporting Games	0.65	18.2	1.27	35.6	1.65	46.2	3.57
Frisbee	0.15	7.6	0.65	33.0	1.17	59.4	1.97
Bicycling	0.33	24.1	0.71	51.8	0.33	24.1	1.37
Jogging	-	-	0.08	11.4	0.62	88.6	0.70
Park Maintenance	-	-	-	-	0.48	100.0	0.48
Dog Walking	0.04	10.3	0.06	15.4	0.29	74.3	0.39
Calisthentics	-	-	0.23	66.7	0.12	34.3	0.35
Wading in Lake	0.21	91.3	0.02	8.7	-	-	0.23
Total Active	5.44	24.8	6.08	27.6	10.47	47.6	21.99
Passive	N	%	N	%	N	%	N
Driving	-	-	-	-	-	-	25.10
Picnicking	2.42	40.3	0.88	14.6	2.71	45.1	6.01
Sunbathing	0.10	1.9	1.44	27.9	3.62	70.2	5.16
Fishing	1.50	61.7	0.60	24.7	0.33	13.6	2.43
Relaxing	0.31	13.4	0.25	10.8	1.75	75.8	2.31
BBQ	0.37	33.3	0.13	11.7	0.61	55.0	1.11
Outdoor Educa.	0.81	77.9	0.04	3.8	0.19	18.3	1.04
Reading	-	-	0.06	9.5	0.63	90.5	0.69
Beerdrinking	-	-	0.13	31.0	0.29	69.0	0.42
Photography	-	-	0.02	8.0	0.23	92.0	0.25
Lovemaking	-	-	0.08	50.0	0.08	50.0	0.16
Total Passive	5.75	29.4	3.63	18.5	10.20	52.1	19.58
TOTAL	11.19	26.9	9.71	23.4	20.67	49.7	41.57
							66.67*

Source: Summer observations

N of observations = 52

*Includes figures for activity 'driving'

TABLE 45

SUMMER ACTIVITIES AND SEX OF PARTICIPANTS IN SECTOR 4

ACTIVITY	SEX OF PARTICIPANT				
	Male		Female		Total
Active	N	%	N	%	N
Walking	7.35	56.8	5.58	43.2	12.93
Sporting Games	2.33	65.3	1.24	34.7	3.57
Frisbee	1.10	55.8	0.87	44.2	1.97
Bicycling	0.94	68.6	0.43	31.4	1.37
Jogging	0.65	92.9	0.05	7.1	0.70
Park Maintenance	0.48	100.0	-	-	0.48
Dog Walking	0.17	43.6	0.22	56.4	0.39
Calisthentics	0.13	37.1	0.22	62.9	0.35
Wading in the Lake	0.19	82.6	0.04	17.4	0.23
Total Active	13.34	60.7	8.65	39.3	21.99
Passive	N	%	N	%	N
Driving	-	-	-	-	25.10
Picnicking	2.83	47.1	3.18	52.9	6.01
Sunbathing	2.31	44.8	2.85	55.2	5.16
Fishing	1.87	77.0	0.56	23.0	2.43
Relaxing	1.10	47.6	1.21	52.4	2.31
BBQ	0.67	60.4	0.44	39.6	1.11
Outdoor Educa.	0.52	50.0	0.52	50.0	1.04
Reading	0.40	58.0	0.29	42.0	0.69
Beerdrinking	0.35	83.3	0.07	16.7	0.42
Photography	0.13	52.0	0.12	48.0	0.25
Lovemaking	0.08	50.0	0.08	50.0	0.16
Total Passive	10.26	52.4	9.32	47.6	19.58
TOTAL	23.60	56.8	17.97	43.2	41.57
					66.67*

Source: Summer observations

N of observations = 52

*Includes figures for activity 'driving'

park and this helps create an atmosphere of privacy favouring retreat-type activities. A section of the main river valley trail is contained in this observation unit. The picnic shelter No. 1, which contains washrooms, is also located in this park sector. There are barbeque stoves and picnic tables randomly placed amongst the trees, and many of these small picnic sites overlook the river.

This area functions predominantly as a picnic area. Passive activities are dominant, accounting for 79.7 percent of all observed activity. More than half the visitors to this sector were identified as adults, children accounting for 29.4 percent and teenagers a further 19.1 percent. Men and women appeared to visit this part of the park in nearly equal numbers with men only slightly outnumbering women (51.3 to 48.7 percent respectively). Of the sexes women were found to be more likely to engage in passive activities (79.2 percent) than were men (73.8 percent). Active-type pursuits are, on the whole discouraged by the forested nature of this sector. The two exceptions to this generalization are walking and jogging, both of which were often noted on the river valley trail, particularly during the afternoon and evening.

Of the activities observed, with the exception of driving, picnicking was the most frequently recorded. An average of 11.2 people was counted either picnicking or barbequeing during each observation period. Concerts were occasionally held in this part of the park and a total of 113 visitors was seen at these events over the entire sampling period. The bands involved played from the picnic shelter, while park visitors sat on the grassy areas surrounding the building, listening to the music.

TABLE 46

SUMMER ACTIVITIES BY AGE GROUPS IN SECTOR 5

ACTIVITY	AGE GROUPS						
	Children		Teens		Adults		Total
Active	N	%	N	%	N	%	N
Walking	1.74	30.9	0.66	11.7	3.24	57.4	5.64
Sporting Games	0.10	10.9	0.36	39.1	0.46	50.0	0.92
Jogging	-	-	0.06	7.7	0.72	92.3	0.78
Bicycling	0.14	22.6	0.22	35.5	0.26	41.9	0.62
Frisbee	0.02	3.8	0.26	50.0	0.24	46.2	0.52
Dog Walking	-	-	0.04	9.5	0.38	90.5	0.42
Park Maintenance	-	-	-	-	0.18	100.0	0.18
Total Active	2.00	20.4	1.60	17.6	5.48	62.0	9.08
Passive	N	%	N	%	N	%	N
Driving	-	-	-	-	-	-	7.68
Picnicking	2.60	45.3	0.78	13.6	2.36	41.1	5.74
Daycamp	2.58	45.6	1.62	28.6	1.46	25.8	5.66
BBQ	1.96	36.2	0.66	12.2	2.80	51.6	5.42
Special Events	1.18	26.9	0.68	15.5	2.54	57.6	4.40
Attend Concerts	0.18	8.0	0.52	23.0	1.56	69.0	2.26
Sunbathing	0.06	2.7	0.08	36.4	1.34	60.9	2.20
Relaxing	0.18	13.2	0.24	17.6	0.94	69.2	1.36
Sitting in Car	0.18	21.9	0.12	14.6	0.52	63.5	0.82
Reading	-	-	0.07	30.4	0.16	69.6	0.23
Total Passive	8.92	31.8	5.49	19.5	13.68	48.7	28.09
TOTAL	10.92	29.4	7.09	19.1	19.16	51.5	37.17
							44.85*

Source: Summer Observations
N of observations = 52
* includes figures for activity 'driving'

TABLE 47

SUMMER ACTIVITIES AND SEX OF PARTICIPANTS IN SECTOR 5

SEX OF PARTICIPANTS

Activity	Male		Female		Total
Active	N	%	N	%	N
Walking	2.78	49.3	2.86	50.7	5.64
Sporting Games	0.64	69.6	0.28	30.4	0.92
Jogging	0.74	94.9	0.04	5.1	0.78
Bicycling	0.44	71.0	0.18	29.0	0.62
Frisbee	0.30	57.7	0.22	42.3	0.52
Dog Walking	0.22	52.4	0.20	47.6	0.42
Park Maintenance	0.18	100.0	-	-	0.18
Total Active	5.30	58.4	3.78	41.6	9.08
Passive	N	%	N	%	N
Driving	-	-	-	-	7.68
Picnicking	3.66	63.8	2.08	36.2	5.74
Day Camp	2.82	49.8	2.84	50.2	5.66
BBQ	2.10	38.7	3.32	61.3	5.42
Special Events	1.96	44.5	2.44	55.5	4.40
Attending Concerts	0.96	42.5	1.30	57.5	2.26
Sunbathing	1.04	47.3	1.16	52.3	2.20
Relaxing	0.74	54.4	0.62	45.6	1.36
Sitting in Car	0.36	43.9	0.46	56.1	0.82
Reading	0.12	52.2	0.11	47.8	0.23
Total Passive	13.76	49.0	14.33	51.0	28.09
TOTAL	19.06	51.3	18.11	48.7	37.17
					44.85*

Source: Summer observations
N of observations = 50
* includes figures for activity 'driving'

Special events also took place in Mayfair Park during the sampling period, two of these having a noticeable effect on activity patterns observed in this sector. "Klondike Days" an annual agricultural fair traditionally held in the last 10 days of July has, among many other events, a "sourdough raft race" on the North Saskatchewan River. As this sector of Mayfair Park overlooks the river, it is a good vantage point from which to watch the rafts; it was crowded with spectators on Sunday July 25, and the parking facilities designed to hold a maximum of 54 cars, were operating well beyond peak capacity. At 1:50 p.m. on this day, 113 vehicles were counted in this area, completely blocking the roadway for an hour.

The second special event was the Heritage Day Festival held on Monday, August 2, 1976. An estimated 18,000 people attended the festival in Mayfair Park where the food, arts and crafts, music, and dances of at least 15 different ethnic groups were on display. No vehicles were allowed into the park, and, a park-and-ride system transported visitors from the city to the festival. Most of the activity for this event was centred in a large tent erected in the middle of the park. As a result, sector 5 remained predominantly quiet on this day, though visitors were coded under the activity 'special events'.

The activity coded as 'daycamp' refers to a summer programme sponsored and organized by the City of Edmonton Department of Parks and Recreation. Handicapped children participate in a wide range of activities such as singing, nature study tours, weaving, tie-dyeing, arts and crafts, under the directions of program leaders. All of these activities were coded as 'daycamp' activities mainly for reasons of convenience.

Tables 46 and 47 indicate the use patterns observed in observation unit 5 of Mayfair Park.

Sector 6

Observation unit 6 is bounded on the west by the park roadway and on the east by the lake shore; in the north it merges into sector 5, and in the south into sector 7. It is an area of the park with a mixed environment, containing both forested, more secluded areas, and open grassy areas. The open areas abut the lake shore and have a gentle gradient. Facilities include a drinking fountain, barbeque stoves, and picnic tables which are scattered amongst the trees.

This sector was found to be one of the most popular parts of Mayfair Park (Table 37) and is arguably the most popular when the relative sizes of the observation units are considered. It appears to function primarily as a picnic area, in much the same manner as sector 5. Passive activities were dominant in this part of the park and accounted for 71.6 percent of all recorded activity. This relationship held for all age groups, though teenagers were more likely to have been observed while engaged in an active pursuit. Similarly, a higher percentage of males (56.7 percent) favoured the more active pastimes.

As in several other sectors of the park, walking was the single most popular activity. Of the retreat-type activities recorded, picnicking, barbequeing and sunbathing were the most frequently observed. In fact, sector 6 recorded higher use levels for each of these three activities than any other park sector. Participation rates for the activity fishing were also highest in this sub-area.

TABLE 48

SUMMER ACTIVITIES BY AGE GROUPS IN SECTOR 6

ACTIVITY	AGE GROUPS						
	Children		Teens		Adults		Total
Active	N	%	N	%	N	%	N
Walking	4.10	28.9	3.27	23.0	6.83	48.1	14.20
Bicycling	0.60	44.9	0.27	20.2	0.46	34.8	1.32
Sporting Games	0.15	16.0	0.25	26.0	0.56	58.0	0.96
Frisbee	-	-	0.29	33.3	0.57	66.7	0.87
Jogging	-	-	0.12	19.4	0.48	80.6	0.60
Dog Walking	0.02	3.6	0.04	7.1	0.48	89.3	0.54
Park Maintenance	-	-	-	-	0.23	100.0	0.23
Total Active	4.87	26.0	4.24	22.6	9.61	51.4	18.72
Passive	N	%	N	%	N	%	N
Driving	-	-	-	-	-	-	12.87
Picnicking	3.73	39.0	1.77	18.5	4.06	42.5	9.56
BBQ Activity	2.0	25.6	1.0	12.8	4.83	61.7	7.83
Sunbathing	0.17	2.9	1.13	18.8	4.73	78.3	6.04
Fishing	3.54	80.0	0.46	10.4	0.42	9.6	4.42
Relaxing	0.42	17.7	0.23	9.7	1.73	72.6	2.38
Reading	-	-	0.08	14.8	0.44	85.2	0.52
Sitting in Car	-	-	0.04	8.3	0.42	91.7	0.46
Nature Study	0.44	85.2	0.04	7.4	0.04	7.4	0.52
Beerdrinking	-	-	0.12	33.3	0.23	66.7	0.35
Total Passive	10.30	32.1	4.87	15.2	16.90	52.7	32.08
TOTAL	15.17	29.9	9.11	17.9	26.51	52.2	50.80
							63.67*

Source: Summer observations

N of observations = 52

*Includes figures for activity 'driving'

TABLE 49

SUMMER ACTIVITIES AND SEX OF PARTICIPANTS IN SECTOR 6

ACTIVITY	SEX OF PARTICIPANT				
	Male		Female		Total
Active	N	%	N	%	N
Walking	7.20	50.6	7.0	49.4	14.20
Bicycling	0.94	71.0	0.38	29.0	1.32
Sporting Games	0.77	80.0	0.19	20.0	0.96
Frisbee	0.56	64.4	0.31	35.6	0.87
Jogging	0.54	90.3	0.06	9.7	0.60
Dog Walking	0.37	67.8	0.17	32.2	0.54
Park Maintenance	0.23	100.0	-	-	0.23
Total Active	10.61	56.7	8.11	43.3	18.72
Passive	N	%	N	%	N
Driving	-	-	-	-	12.87
Picnicking	4.12	43.1	5.44	56.9	9.56
BBQ Activity	3.90	49.9	3.92	50.1	7.83
Sunbathing	3.23	53.5	2.81	46.5	6.04
Fishing	3.52	79.6	0.90	20.4	4.42
Relaxing	1.21	50.8	1.17	49.2	2.38
Reading	0.17	33.3	0.35	66.7	0.52
Sitting in Car	0.33	70.8	0.13	29.2	0.46
Nature Study	0.31	59.2	0.21	40.8	0.52
Beerdrinking	0.22	61.1	0.13	38.9	0.35
Total Passive	17.01	53.1	15.06	46.9	32.08
TOTAL	27.62	54.4	23.17	45.6	50.80
					63.67*

Source: Summer observations

N of observations = 52

*Includes figures for activity 'driving'

The activity 'nature study' was part of the daycamp programme and was organized by the Department of Parks and Recreation. Handicapped children were taken on a tour of the park during which nature study classes would be held. The lake shore of sector 6 was a convenient site for these classes.

Use levels peaked markedly on weekends in sector 6. This was indicated by the data for the number of cars parked in the zone. The weekday average of 5.7 cars parked (252 cars in 44 counts) contrasts greatly with the weekend average of 49.5 (396 cars in 8 counts).

Tables 48 and 49 show in detail the range of activities observed in sector 6.

Sector 7

Observation unit 7 is the area of the park immediately east of sector 6. It is bisected by the main park access road and contains, like sectors 5 and 6, a mixture of wooded and open grassy areas. The eastern shore of the lake provides the western boundary of this zone. North of the roadway, the zone is open and slopes gently into the lake, while south of the road, the zone is heavily wooded and is cut by the main river valley trail.

Most of the recreational behaviour observed in this sector occurs north of the road. Here, as in sector 6, passive recreational activities are dominant for all age groups recorded. Men outnumbered women in the observations - over 60 percent of all visitors counted in this sector were male. Walking and sporting games were the most common active pursuits, while sunbathing, picnicking, barbeque activity and 'beerdrinking' were the favoured passive activities. Beerdrinking

TABLE 50

SUMMER ACTIVITIES BY AGE GROUPS IN SECTOR 7

ACTIVITY	AGE GROUPS						
	Children		Teens		Adults		Total
Active	N	%	N	%	N	%	N
Walking	1.71	27.3	1.42	22.7	3.13	50.0	6.26
Sporting Games	.05	2.2	0.37	15.2	2.0	82.6	2.42
Frisbee	0.13	9.2	0.71	50.0	0.58	40.8	1.42
Bicycling	0.24	21.0	0.45	39.5	0.45	39.5	1.14
Jogging	-	-	0.05	14.9	0.45	87.1	0.50
Dog Walking	-	-	0.08	30.0	0.18	70.0	0.26
Total Active	2.13	17.8	3.08	25.7	6.79	56.5	12.00
Passive	N	%	N	%	N	%	N
Driving	-	-	-	-	-	-	12.9
Sunbathing	-	-	1.76	38.7	2.79	61.3	4.55
Picnicking	1.03	34.2	0.92	30.7	1.05	35.1	3.0
BBQ Activity	0.55	29.5	0.26	14.1	1.05	56.4	1.86
Beerdrinking	-	-	0.71	38.6	1.13	61.4	1.84
Relaxing	-	-	0.66	37.9	1.08	62.1	1.74
Fishing	0.76	58.9	0.53	41.1	-	-	1.29
Nature Study	0.76	72.4	0.11	10.5	0.18	17.1	1.05
Sitting in Car	-	-	-	-	0.71	100.0	0.71
Total Passive	3.10	19.3	4.95	30.9	7.99	47.1	16.04
TOTAL	5.23	18.7	8.03	28.6	14.78	52.7	28.04
							40.94*

Source: Summer observations

N of observations = 38

*Includes figures for activity 'driving'

TABLE 51

SUMMER ACTIVITIES AND SEX OF PARTICIPANTS IN SECTOR 7

ACTIVITY	SEX OF PARTICIPANT				
	Male		Female		Total
Active	N	%	N	%	N
Walking	3.26	52.1	3.0	47.9	6.26
Sporting Games	1.71	70.7	0.71	29.3	2.42
Frisbee	1.05	74.1	0.37	25.9	1.42
Bicycling	0.96	83.7	0.18	16.3	1.14
Jogging	0.50	100.0	-	-	0.50
Dog Walking	0.16	60.0	0.11	40.0	0.27
Total Active	7.64	63.6	4.37	36.4	12.01
Passive	N	%	N	%	N
Driving	-	-	-	-	12.9
Sunbathing	2.21	48.6	2.34	51.4	4.55
Picnicking	1.76	58.8	1.24	41.2	3.0
BBQ Activity	0.87	46.5	0.99	53.5	1.86
Beerdrinking	1.37	74.3	0.47	25.7	1.84
Relaxing	1.06	60.6	0.68	39.4	1.74
Fishing	1.03	79.6	0.26	20.4	1.29
Nature Study	0.60	57.5	0.45	42.5	1.05
Sitting in Car	0.47	66.7	0.24	33.3	0.71
Total Passive	9.37	58.4	6.67	41.6	16.04
TOTAL	17.01	60.7	11.04	39.3	28.04
					40.94*

Source: Summer observations

N of observations = 38

*Includes figures for activity 'driving'

was the code name given to activity involving the consumption of alcohol. It was a group activity, and the participants were typically teenagers and young adults. Often stereos were played loudly while the group sat around and drank beer. One teenage visitor was asked why he and his companions chose this part of the park in which to drink. He replied that the park's one-way traffic system forced police patrols to travel almost a complete loop before arriving at this sector, allowing his group plenty of time to conceal their beer cases.

This sector of the park appeared to attract many teenagers and young adults. Over a quarter of all visitors counted in this sector were teenagers. The impression gained during the period of observations was that this was due less to the environmental attributes of the particular site, and more to the pre-established activity patterns of the park visitors. In other words, young people would congregate in this part of the park, because they knew from previous visits that this is where their friends and acquaintances could be found.

Tables 50 and 51 indicate the type of activities and the characteristics of participants observed in park sector 7.

Sector 8

Sub area 8 is located in the extreme south-eastern corner of the park. It is the most heavily wooded area of the park and, consequently, the most secluded and private sector. Much of the vegetation here is 'natural' in that little was disturbed when the park was constructed. The picnic shelter No. 2, which contains washrooms, is situated here and other facilities include barbeque stoves and picnic tables. Off the road parking for 128 vehicles is available immediately north of the picnic shelter.

Relatively low levels of use were recorded in sector 8 which is one of the larger observation units (see Table 37). Most of the activity observed was passive in kind, this relationship holding for all age groups and for both males and females. Picnicking, barbeque activity, daycamp activities and sunbathing were the favoured passive activities while walking and sporting games were the most frequently observed active pastimes.

This sector functions primarily as a picnic area, yet a degree of conflict was seen to exist between the picnickers and other users. In particular, the picnickers were disturbed by groups of young adults and teenagers who visited this part of the park in the evenings to meet their friends, drink beer, and play their car stereos. Frequently, on Friday and Saturday evenings, these large groups of young people would arrive between 8 and 9 p.m. and would more or less 'take over' this sector, driving the family groups out. To a lesser degree conflict was also observed between participants in sporting games and family groups engaged in picnics.

Sector 8 suffers fewer traffic problems than other sectors of the park. The weekday average of 5.9 vehicles parked in this zone (295 cars in 50 counts) was found to increase to a weekend average of 53.4 vehicles (534 cars in 10 counts). There appeared to be adequate parking space for all use levels observed during the course of the sampling period.

Tables 52 and 53 present the data from sector 8.

TABLE 52

SUMMER ACTIVITIES BY AGE GROUPS IN SECTOR 8

ACTIVITY	AGE GROUPS						
	Children		Teens		Adults		Total
Active	N	%	N	%	N	%	N
Walking	0.98	28.3	0.90	26.0	1.58	45.7	3.46
Sporting Games	0.46	37.1	0.40	32.3	0.38	30.6	1.24
Bicycling	0.12	16.4	0.17	23.3	0.44	60.3	0.73
Frisbee	0.10	30.3	0.06	18.2	0.17	51.5	0.33
Jogging	-	-	0.04	16.0	0.21	84.0	0.25
Park Maintenance	-	-	-	-	0.17	100.0	0.17
Total Active	1.66	26.9	1.57	25.4	2.95	47.7	6.18
Passive	N	%	N	%	N	%	N
Driving	-	-	-	-	-	-	6.35
Picnicking	2.40	40.4	1.23	20.7	2.31	38.9	5.94
BBQ Activity	1.42	36.6	0.67	17.3	1.79	46.1	3.88
Daycamp	1.92	58.2	0.48	14.5	0.90	27.3	3.30
Sunbathing	-	-	0.36	14.5	2.12	85.5	2.48
Beerdrinking	-	-	0.69	44.8	0.85	55.2	1.54
Relaxing	0.12	9.8	0.12	9.8	0.98	80.4	1.22
Playing the stereo	-	-	0.63	56.8	0.48	43.2	1.11
Sitting in Car	-	-	0.29	43.9	0.37	52.1	0.66
Total Passive	5.86	29.1	4.47	22.2	9.8	48.7	20.13
TOTAL	7.52	28.6	6.04	23.0	12.75	48.4	26.31
							32.66*

Source: Summer observations

N of observations = 52

*Includes figures for activity 'driving'

TABLE 53

SUMMER ACTIVITIES AND SEX OF PARTICIPANTS IN SECTOR 8

ACTIVITY	SEX OF PARTICIPANT				
	Male		Female		Total
Active	N	%	N	%	N
Walking	1.86	53.8	1.60	46.2	3.46
Sporting Games	0.79	63.9	0.46	37.1	1.24
Bicycling	0.52	71.0	0.21	29.0	0.73
Frisbee	0.23	69.7	0.10	30.3	0.33
Jogging	0.25	100.0	-	-	0.25
Park Maintenance	0.17	100.0	-	-	0.17
Total Active	3.81	61.8	2.37	38.2	6.18
Passive	N	%	N	%	N
Driving	-	-	-	-	6.35
Picnicking	3.23	54.4	2.71	45.6	5.94
BBQ Activity	2.15	55.4	1.73	44.6	3.88
Daycamp	1.83	55.5	1.47	44.5	3.30
Sunbathing	1.21	48.8	1.27	51.2	2.48
Beerdrinking	1.02	66.2	0.52	33.8	1.54
Relaxing	0.54	44.3	0.68	55.7	1.22
Playing the stereo	0.79	71.2	0.32	28.8	1.11
Sitting in Car	0.38	57.6	0.28	42.4	0.66
Total Passive	11.15	55.4	8.98	44.6	20.13
TOTAL	14.96	56.9	11.35	43.1	26.31
					32.66*

Source: Summer observations

N of observations = 52

*Includes figures for activity 'driving'

Sector 9

Sector 9 is situated in the southern central section of Mayfair Park, north of the picnic shelter No. 2 and immediately south of the adventure playground. It is an area of flat, grassy, open space, with very few trees, and with a man-made hummock that stands some 6 metres above the surrounding fields. This hummock proved a convenient site from which to observe people and activities.

More than any other part of the park, this sector is characterized by the active nature of the recreational behaviour observed. All age groups were seen to engage in the more active pastimes and, in fact, active pursuits accounted for 64.4 percent of all observed recreational behaviour. Sporting games, such as football and catch were recorded more frequently in this sector than in any other park sector, comprising 35.5 percent of all active pursuits noted. This is in contrast with other areas of the park where the activity walking dominated the active pursuits observed.

This sector of the park was also characterized by the youth of the visitors observed within it. Over 30 percent of participants in active pursuits were classified as teenagers, a further 18.8 percent were children. Similarly, more than a quarter of all visitors to this sector were teenagers. Sub area 9 was also visited more often by males (67.2 percent) than by females (32.8 percent).

Sector 9, like sector 8, appears to function as a meeting place for young people, and as an area where these younger visitors can engage in "free play" or sporting activities. Moreover, as picnic facilities are scarce in this part of the park there is not the conflict between older and younger users that was observed in sub area 8.

TABLE 54

SUMMER ACTIVITIES BY AGE GROUPS IN SECTOR 9

ACTIVITY	AGE GROUPS						
	Children		Teens		Adults		Total
Active	N	%	N	%	N	%	N
Walking	1.13	30.7	1.26	34.2	1.29	35.1	3.68
Sporting Games	0.50	13.8	0.84	23.1	2.29	63.1	3.63
Frisbee	0.16	9.4	0.50	29.6	1.03	61.0	1.69
Bicycling	0.13	26.0	0.21	42.0	0.16	32.0	0.50
Jogging	-	-	0.11	25.6	0.32	74.4	0.43
Dog Walking	-	-	0.16	55.2	0.13	44.8	0.29
Total Active	1.92	18.8	3.08	30.1	5.22	51.1	10.22
Passive	N	%	N	%	N	%	N
Driving	-	-	-	-	-	-	4.11
Sunbathing	-	-	0.50	25.4	1.47	74.6	1.97
Beerdrinking	-	-	0.29	27.6	0.76	72.4	1.05
BBQ Activity	0.26	27.4	0.16	16.8	0.53	55.8	0.95
Picnicking	0.13	16.5	0.05	6.3	0.61	77.2	0.79
Playing the Stereo	-	-	0.13	25.0	0.39	75.0	0.52
Relaxing	-	-	0.08	21.6	-.29	78.4	0.37
Total Passive	0.39	6.9	1.21	21.4	4.05	71.7	5.65
TOTAL	2.31	14.6	4.29	27.0	9.27	58.4	15.87
							19.98*

Source: Summer observations

N of observations = 38

*Includes figures for activity 'driving'

TABLE 55

SUMMER ACTIVITIES AND SEX OF PARTICIPANTS IN SECTOR 9

ACTIVITY	SEX OF PARTICIPANT				
	Male		Female		Total
Active	N	%	N	%	N
Walking	2.05	55.7	1.63	44.3	3.68
Sporting Games	3.18	87.6	0.45	12.4	3.63
Frisbee	1.08	63.9	0.61	36.1	1.69
Bicycling	0.34	58.0	0.16	32.0	0.50
Jogging	0.39	90.7	0.04	9.3	0.43
Dog Walking	0.16	55.2	0.13	44.8	0.29
Total Active	7.20	70.5	3.02	29.5	10.22
Passive	N	%	N	%	N
Driving	-	-	-	-	4.11
Sunbathing	1.02	51.8	0.95	48.2	1.97
Beerdrinking	0.76	72.4	0.29	27.6	1.05
BBQ Activity	0.55	57.9	0.40	42.1	0.95
Picnicking	0.50	63.3	0.29	36.7	0.79
Playing the Stereo	0.42	80.8	0.10	19.2	0.52
Relaxing	0.21	56.8	0.16	43.2	0.37
Total Passive	3.46	61.2	2.19	38.8	5.65
TOTAL	10.66	67.2	5.21	32.8	15.87
					19.98*

Source: Summer observations

N of observations = 38

*Includes figures for activity 'driving'

Parking does not seem to be a problem in this area as the large south-eastern parking lot can accommodate the spillover parking from this zone. In the 38 counts of parked vehicles in this area, only 64 cars were recorded, an average of 1.7 cars per count.

Tables 54 and 55 indicate the activities observed, and the number and characteristics of visitors to this part of the park.

Sector 10

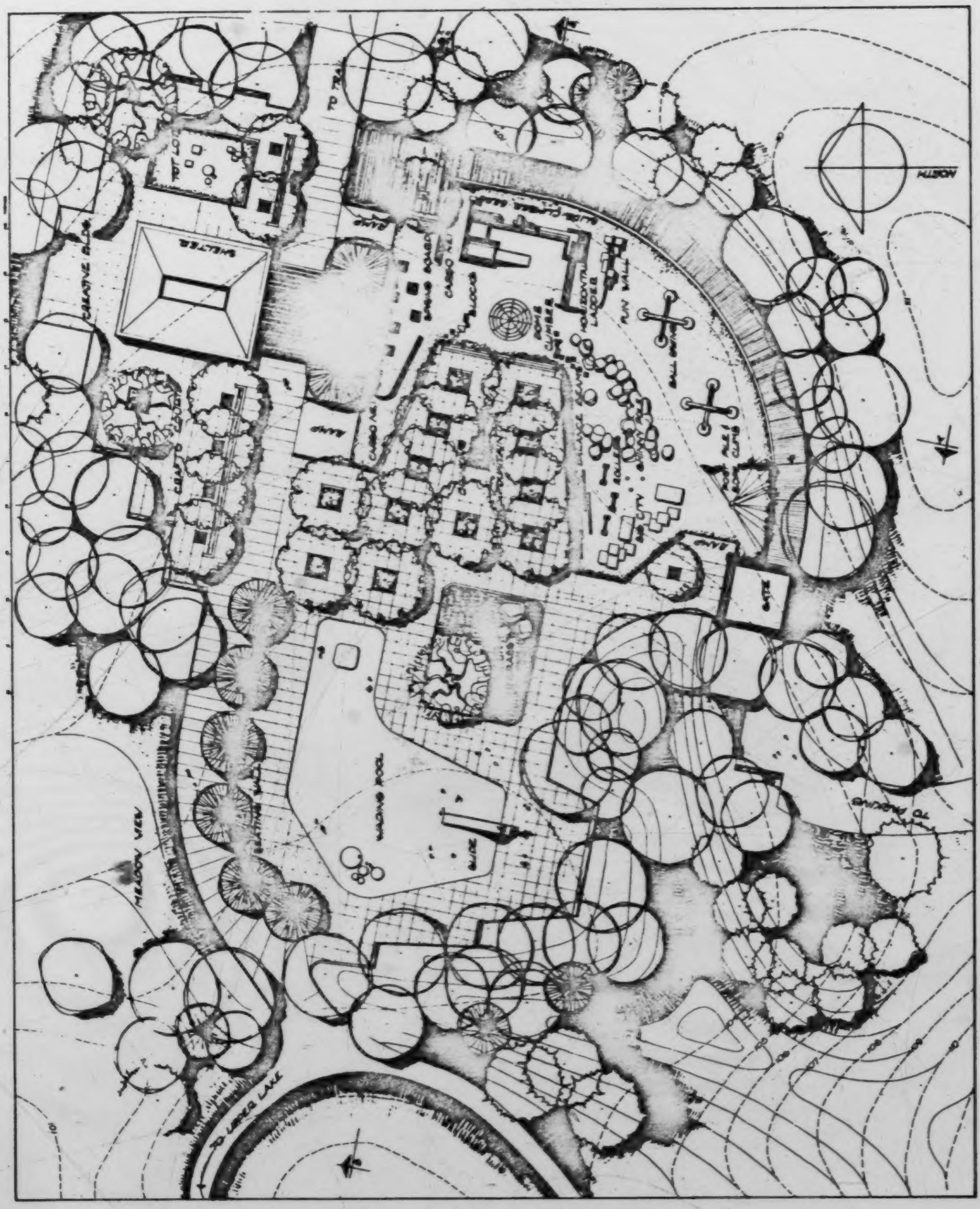
Observation unit 10 is the children's adventure playground located in the central eastern section of the park. Included in this observation unit is the area immediately surrounding the playground where can be found a building housing washrooms and a drinking fountain; as well as some recreational equipment such as volleyball nets. The playground, which was completed in 1974, features a sand lot and a variety of play apparatus (Figure 16).

A total of 2,972 visitors was recorded in this observation unit during the sampling period, an average of 57.2 people per count (Table 37). Females greatly outnumbered males comprising 60.8 percent of all visitors to this sector, and 67.8 percent of participants in passive-type activities. As expected, most visitors (52.3 percent) to the playground were children, yet adults accounted for more than one third of the visitors (35.7 percent). Teenagers comprised less than an eighth of those observed.

The activity 'play' was the most commonly observed behaviour. It involved only children and teenagers and referred to the use of the playground apparatus. Adults counted within the playground were classified as 'supervising play'. Teenage visitors were occasionally observed in this role as well as adults. A major difficulty with

Figure 16

The Mayfair Park Adventure Playground: Floor Plan


SHELTER
CREATIVE BLDG.
TOT LOT
NORTH
CARGO NET
DOME CLIMBER
HORIZONTAL LADDER
FUN WALL
GATE
WADING POOL
SLIDE
MEADOW VIEW
TO UPPER LAKE

Source: Edmonton Parks and Recreation

Poor copy

observations on the playground concerned identifying the sex of very young children. As a result the statistics for the activity 'play' should be interpreted with caution.

Weekend and evening use of the playground area was particularly heavy. For example, at 12:45 pm on Friday, July 9, there were 37 children within the playground. At 6:45 p.m. on the same day this total had risen to 73 children. On Sunday, August 1, at 4:40 p.m., 91 children were playing in the area, the highest total recorded during the sampling period.

The data presented in Tables 56 and 57 indicate a pattern of active pursuits occupying children and teenagers, while adults engage in passive activities such as watching their children play, reading, picnicking, or sunbathing. Frequently a group of adults would be seen picnicking while their children were nearby playing. A high degree of interaction among the children was noticed in the playground. In fact, when the playground was not busy, children could often be observed playing together on one piece of equipment rather than alone in a less crowded section of the playground. This area therefore appeared to fulfil different functions for different user groups. Younger visitors could engage in expressive, active pursuits, and interact with other children, while adults could take advantage of this and quietly read, relax and sunbathe.

Some management-related problems were noted in this area. Acts of vandalism were observed on two occasions when broken glass was found in the children's sand pit. For this reason, the City Parks and Recreation Department employed a playground supervisor for the summer months, to discourage the occurrence of such acts.

The activity 'arts and crafts' refers to a program of painting classes organized by the Parks Department. These classes were encountered on three occasions and were held in the building adjacent to the playground.

TABLE 56

SUMMER ACTIVITIES BY AGE GROUPS IN SECTOR 10

ACTIVITY	AGE GROUPS						
	Children		Teens		Adults		Total
Active	N	%	N	%	N	%	N
Play	17.92	91.3	1.71	8.7	-	-	19.63
Walking	2.27	46.2	0.58	11.8	2.06	42.0	4.91
Supervising Play	-	-	0.83	21.9	2.96	78.1	3.79
Sporting Games	0.19	46.3	0.06	7.4	0.19	46.3	0.41
Bicycling	0.27	73.0	0.06	16.2	0.04	10.8	0.37
Frisbee	-	-	0.17	73.9	0.06	26.1	0.23
Total Active	20.65	70.4	3.41	11.6	5.31	18.0	29.34
Passive	N	%	N	%	N	%	N
Watching play	1.67	22.4	0.75	10.1	5.04	67.5	7.46
Driving	-	-	-	-	-	-	7.04
Picnicking	2.06	41.4	0.87	17.6	2.04	41.0	4.97
BBQ Activity	1.29	42.4	0.48	15.8	1.27	41.8	3.04
Sunbathing	.06	2.4	0.13	5.2	2.31	92.4	2.50
Relaxing	0.13	9.0	0.29	20.1	1.02	70.9	1.44
Reading	-	-	0.08	8.8	0.83	91.2	0.91
Arts/Crafts	0.25	28.7	0.10	11.5	0.52	59.8	0.87
Total Passive	6.00	28.9	2.70	13.0	13.03	58.1	20.77
TOTAL	26.65	52.3	6.11	12.0	18.34	35.7	51.07
							57.15*

Source: Summer observations

N of observations = 52

*Includes figure for activity 'driving'

TABLE 57

SUMMER ACTIVITIES AND SEX OF PARTICIPANTS IN SECTOR 10

ACTIVITY	SEX OF PARTICIPANT				
	Male		Female		Total
Active	N	%	N	%	N
Play (a)	9.60	48.9	10.03	51.1	19.63
Walking	2.10	42.8	2.81	57.2	4.91
Supervising Play	0.96	25.3	2.83	74.7	3.79
Sporting Games	0.31	75.6	0.10	24.4	0.41
Bicycling	0.22	59.5	0.15	40.5	0.37
Frisbee	0.15	65.2	0.08	34.8	0.23
Total Active	13.34	45.5	16.00	54.5	29.34
Passive	N	%	N	%	N
Watching Play	1.83	24.5	5.63	75.5	7.46
Driving	–	–	–	–	7.04
Picnicking	1.56	31.4	3.41	68.6	4.97
BBQ Activity	1.46	48.0	1.58	52.0	3.04
Sunbathing	0.73	29.2	1.77	70.8	2.50
Relaxing	0.67	46.5	0.77	53.5	1.44
Reading	0.17	18.7	0.74	81.3	0.91
Arts/Crafts	0.27	31.0	0.60	69.0	0.87
Total Passive	6.69	32.2	14.50	67.8	20.77
TOTAL	20.03	39.2	30.50	60.8	51.07
					57.15*

Source: Summer observations

N of observations = 52

(a) Figures for the activity 'play' may be somewhat unreliable due to the difficulty of determining the sex of young children.

*Includes figures for activity 'driving'

WINTER USE PATTERNS IN MAYFAIR PARK

Park Sectors and Winter Activities

As Table 58 shows, winter use patterns in Mayfair Park differ in several respects from those observed in summer. Winter use was generally less intensive with the exception of sectors 3 (the pavilion) and 6 (the lake or ice), which recorded heavy use. Summer visitors were observed in all areas of Mayfair Park though the picnic areas and the playground were favoured locations. Winter users, on the other hand, were overwhelmingly concentrated in sectors 3 and 6. Nearly three quarters (72.9 percent) of all winter visitors were seen in these two areas. The other park sectors revealed low levels of use.

TABLE 58

DISTRIBUTION OF WINTER VISITORS TO MAYFAIR PARK BY PARK SECTORS

Park Sector	N of Observations	Total N of People Observed	Average N of People Observed Per Count	Percentage of Park Total
1	40	480	12.00	4.5
2	40	602	15.05	5.6
3	40	1779	44.48	16.6
4	40	385	9.64	3.6
5	40	608	15.21	5.7
6	40	6037	150.93	56.3
7	40	506	12.64	4.7
0	40	318	7.94	3.0
TOTAL	320	10,715	267.89	-

Source: Winter observations

Winter use patterns are summarized in tables 59 to 74 in a manner identical to that used to outline summer use patterns.

Sector 1

A total of 480 people was recorded in sector 1 during the period of winter observations. Walkers and cross-country skiiers together accounted for almost 95 percent of observed activity in this area of the park. With the sole exception of driving, all recorded activities were active pursuits. Adults and children formed the majority of those observed, while males outnumbered females 55.1 percent to 44.9 percent.

The activity category 'vandalism' was devised in response to the recording of eight individuals who were seen attempting to destroy the recently erected 'William Hawrelak Park' sign at the entrance to the park.

In general, parking problems in sector 1 were less acute in the winter than in the summer. A weekday average of 1.7 vehicles (55 vehicles in 33 counts) increased to a weekend average of 8.2 parked vehicles (98 vehicles in 12 counts), still well below the capacity of this area. Some congestion was noted on Sunday, January 30, when 51 cars were parked in this zone by 1 p.m.

Tables 59 and 60 summarize the observation data from sector 1.

Sector 2

In sector 2, the main parking lot, fewer activities were recorded in the winter counts than in the summer observations. Driving, as expected, was the most frequently noted activity with walking and cross-country skiing also common. The main parking lot is located

TABLE 59

WINTER ACTIVITIES BY AGE GROUPS IN SECTOR 1

ACTIVITY	AGE GROUPS						
	Children		Teens		Adults		Total
Active	N	%	N	%	N	%	N
Walking	1.3	32.5	0.3	7.5	2.4	60.0	4.0
X C Skiing	0.5	14.7	0.5	14.7	2.4	70.6	3.4
Vandalism	-	-	-	-	0.2	100.0	0.2
Jogging	-	-	-	-	0.2	100.0	0.2
Driving	-	-	-	-	-	-	4.2
TOTAL	1.8	23.1	0.8	10.3	5.2	66.7	7.8
							12.0*

Source: Winter observations

N of observations = 40

*Includes figures for activity 'driving'

TABLE 60

WINTER ACTIVITIES AND SEX OF PARTICIPANTS IN SECTOR 1

ACTIVITY	SEX OF PARTICIPANT				
	Male		Female		Total
	N	%	N	%	N
Walking	2.4	60.0	1.6	40.0	4.0
X C Skiing	1.5	44.1	1.9	55.9	3.4
Vandalism	0.2	100.0	-	-	0.2
Jogging	0.2	100.0	-	-	0.2
Driving	-	-	-	-	4.2
TOTAL	4.3	55.1	3.5	44.9	7.8
					12.0*

Source: Winter observations

N of observations = 40

*Includes figures for activity 'driving'

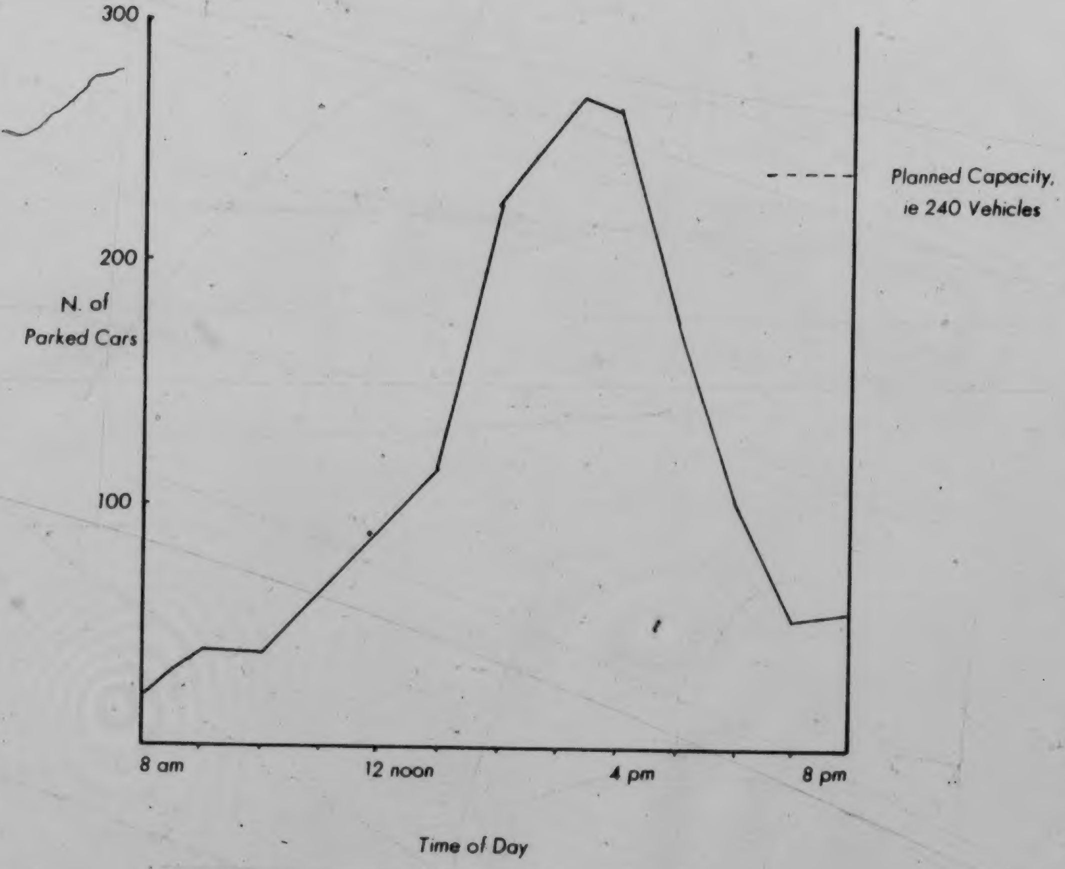
close to the skating pavilion and the ice. Most winter visitors parked in this sector and then walked or skiied to the pavilion. Very few other activities were recorded. Users of this sector were predominantly male (60.8 percent) and adult (53.7 percent), though children (38 percent) were often counted. Teenagers were underrepresented comprising fewer than one in twelve visitors to this site.

Although use levels recorded were lower than for the summer observations, congestion was a problem in this sector. The weekday average of 4.5 vehicles parked in this zone (171 cars in 38 counts) rose to 164.0 (1968 cars in 12 counts) for the weekend. At 3:30 p.m. on Sunday, January 30, there were 270 vehicles in the main lot. This represents 30 more vehicles than the facility is designed to accommodate. Hourly counts of the number of vehicles parked in this area on that Sunday were made from 8 a.m. to 8 p.m. The results are presented in Figure 17 which shows that the number of cars parked in sector 2 (and presumably park visitors) rose steeply between 10 a.m. and 3:30 p.m. and declined from that time until 7 p.m. An increase in the rate of arrivals occurred at 1 p.m. This is indicated by a break in slope of the graph. Between 3 p.m. and approximately 4:10 p.m. the lot was operating at levels beyond its planned capacity.

While these episodes of peak winter use invariably occurred on weekends, particularly Sundays, they also appeared closely related to the existence of favourable weather conditions. In summer, it was noted that crowding was associated primarily with the weekend period, often despite the occurrence of windy, unpleasant weather whereas the winter observations revealed that the weather was a critical factor affecting visitation rates. For example, large numbers of visitors

Figure 17

Vehicles Parked in Sector 2 on Sunday, January 30, 1977, by Time of Day.



Source: Winter Observations

TABLE 61

WINTER ACTIVITIES BY AGE GROUPS IN SECTOR 2

ACTIVITY	AGE GROUPS						
	Children N	 %	Teens N	 %	Adults N	 %	Total N
Walking	2.10	45.7	0.50	10.9	2.00	43.4	4.60
X C Skiing	0.15	11.1	-	-	1.20	88.9	1.35
Snowshoeing	0.05	50.0	-	-	0.05	50.0	0.10
Driving	-	-	-	-	-	-	9.00
TOTAL	2.30	38.0	0.50	8.3	3.25	53.7	6.05
							15.05*

Source: Winter observations

N observations = 40

*Includes figures for activity 'driving'

TABLE 62

WINTER ACTIVITIES AND SEX OF PARTICIPANTS IN SECTOR 2

ACTIVITY	SEX OF PARTICIPANT				
A	Male N	 %	Female N	 %	Total N
Walking	2.60	56.5	2.00	43.5	4.60
X C Skiing	0.98	72.2	0.37	27.8	1.35
Snowshoeing	0.10	100.0	-	-	0.10
Driving	-	-	-	-	9.00
TOTAL	3.68	60.8	2.37	39.2	6.05
					15.05*

Source: Winter observations

N of observations = 40

*Includes figures for activity 'driving'

were recorded on two Sundays in January, the 16th and the 30th. On both these days the temperature ranged between -10°C and -4°C, and there was little wind while the observations were taking place. By way of contrast, Sunday, January 9th, was overcast, cold (between -24°C and -13°C) and relatively windy (gusting to 22 kph), so that at 3 p.m. much of the park was deserted and there were only 60 skaters on the ice.

Tables 61 and 62 illustrate the winter activities and participants recorded in sector 2.

Sector 3

Sector 3, the pavilion and its immediate surroundings, was the most intensively used sampling unit. In all, 1,779 people were counted during the period of winter observations, an average of 44.48 per count (Table 58). Walkers and visitors changing their clothing (for example putting on or removing their skates or skis) accounted for most of these users. Many people were also seen relaxing in the pavilion or outside on the edge of the ice watching the passing scene.

In contrast to the other winter sampling units, the activities recorded in this sector were predominantly passive in kind. The pavilion functions as a service centre for park users where lockers, washrooms and a snack bar are available and it appears that there is a great demand for these services, as on weekends this facility is often crowded. Counts of over 300 visitors in the pavilion were recorded on two Sundays during the winter data collection period. At 3:45 p.m. on Sunday, January 16, there were 307 people counted inside the pavilion area. Two weeks later, on January 30, at 2:30 p.m., 316 people were recorded in the same area. Counts on these two days

TABLE 63

WINTER ACTIVITIES BY AGE GROUPS IN SECTOR 3

ACTIVITY	AGE GROUPS						
	Children		Teens		Adults		Total
	N	%	N	%	N	%	N
Walking	3.68	23.0	2.17	13.6	10.13	63.4	15.98
Changing Clothing	4.13	29.6	2.10	15.0	7.73	55.4	13.16
Relaxing	3.40	34.1	2.28	22.8	4.30	43.1	9.98
Buying Food	0.85	30.2	0.93	33.1	1.03	36.7	2.81
Using Lockers	0.20	11.4	0.55	31.4	1.00	57.2	1.75
TOTAL	12.26	27.6	8.03	18.1	24.19	54.3	44.48

Source: Winter observations

N of observations = 40

TABLE 64

WINTER ACTIVITIES AND SEX OF PARTICIPANTS IN SECTOR 3

ACTIVITY	SEX OF PARTICIPANT				
	Male		Female		Total
	N	%	N	%	N
Walking	8.95	56.0	6.63	44.0	15.98
Changing Clothing	6.53	46.8	7.43	53.2	13.96
Relaxing	5.15	51.6	4.83	48.4	9.98
Buying Food	1.25	44.5	1.56	55.5	2.81
Using Lockers	0.68	38.9	1.07	61.1	1.75
TOTAL	22.56	50.7	21.92	49.3	44.48

Source: Winter observations

N of observations = 40

consistently recorded over 200 pavilion users.

The problem of crowding may be in part a result of the restricted opening hours of the facility which are from 4 p.m. to 10 p.m. on weekdays; 2 - 10 p.m. on Fridays; and 12 noon to 10 p.m. on the weekend. On the other hand, it may be that park visitors are relatively inflexible regarding the timing of their visits. Congestion in the pavilion was characteristically greatest between the hours of 2 p.m. and 4 p.m., suggesting that even if the opening hours of the building were extended, most users would still elect to visit during this mid-afternoon period.

Tables 63 and 64 present the data from sector 3.

Sector 4

Sampling unit 4, the central area of Mayfair park, received little use during the period of winter observations. It is an open, largely unprotected part of the park and, with the exception of the activity driving, it was used solely for active pursuits. If the activity driving is excluded from the statistics describing use in this area, a total of only 58 recreationists was recorded over the sampling period. Adults formed the majority of these (74 percent) and most were male (54.1 percent).

Use patterns in this park sector in winter diverged widely from those observed during the summer. In summer this sector was widely used, supporting a large number of both active and passive-type pursuits. The small amount of winter use can be explained by the lack of shelter in this sector. Tables 65 and 66 indicate the number of people seen in sector 4 in an average census by age, sex and activity.

TABLE 65

WINTER ACTIVITIES BY AGE GROUPS IN SECTOR 4

ACTIVITY	AGE GROUPS						
	Children		Teens		Adults		Total
	N	%	N	%	N	%	N
X C Skiing	0.08	10.1	0.08	10.1	0.63	79.8	0.79
Walking	0.08	14.3	0.08	14.3	0.40	71.4	0.56
Snowshoeing	0.03	27.3	0.03	27.3	0.05	45.4	0.11
Driving	-	-	-	-	-	-	8.18
TOTAL	0.19	13.0	0.19	13.0	1.08	74.0	1.46
							9.64*

Source: Winter observations

N of observations = 40

*Includes figures for activity 'driving'

TABLE 66

WINTER ACTIVITIES AND SEX OF PARTICIPANTS IN SECTOR 4

ACTIVITY	SEX OF PARTICIPANT				
	Male		Female		Total
	N	%	N	%	N
X C Skiing	0.40	50.6	0.39	49.4	0.79
Walking	0.28	40.0	0.28	50.0	0.56
Snowshoeing	0.11	100.0	-	-	0.11
Driving	-	-	-	-	8.18
TOTAL	0.79	54.1	0.67	45.9	1.46
					9.64*

Source: Winter observations

N of observations = 40

*Includes figures for activity 'driving'

Sector 5

For the winter observations, sector 5 included most of the western section of Mayfair Park. It was created by amalgamating the summer sectors 5 and 6. It is a wooded, sheltered part of the park, and for this reason, a range of active and passive pursuits was noted during the sampling period. Walkers and cross-country skiers were the most frequently observed active recreationists while picnicking and barbeque activities were chief among the passive pursuits. Adults (65.9 percent) and males (51.5 percent) formed the majority of those observed though nearly one in seven (14 percent) was a teenager.

A total of 131 people was counted in this sector over the data collection period (excluding those recorded as driving) indicating only a limited amount of winter use. Parking problems were few as the weekday average of 2.4 vehicles (80 cars in 33 counts) and the weekend average of 58 vehicles (406 vehicles in 7 counts) shows. The data from sector 5 are presented in Tables 67 and 68.

Sector 6

Sector 6 is the skating facility and, when counts were conducted, it was divided into two parts. This was necessary on busy days when it was impossible to determine accurately the number and characteristics of skaters on the ice at any particular time. For the purposes of analysis, counts on the two parts of sector 6 were summed. It took an estimated 5 minutes for skaters to complete a circuit of the ice in sector 6. The number of skaters was determined by fixing an imaginary line across the ice and tallying, on a portable calculator, the people who passed over this line during a 5 minute observation period. It was not possible to distinguish sex and age groups by this

TABLE 67

WINTER ACTIVITIES BY AGE GROUPS IN SECTOR 5

ACTIVITY	AGE GROUPS						
	Children		Teens		Adults		Total
	N	%	N	%	N	%	N
Walking	0.30	20.5	0.18	12.3	0.98	67.2	1.46
X C Skiing	0.23	17.6	0.25	19.1	0.83	63.3	1.31
Picnicking	0.08	30.8	0.03	11.5	0.15	57.7	0.26
BBQ Activity	0.05	50.0	-	-	0.05	50.0	0.10
Jogging	-	-	-	-	0.10	100.0	0.10
Dog Walking	-	-	-	-	0.05	100.0	0.05
Driving	-	-	-	-	-	-	11.93
TOTAL	0.66	20.1	0.46	14.0	2.16	65.9	3.28
							15.21*

Source: Winter observations.

N of observations = 40

*Includes figures for activity 'driving'

method.

A total of 5,205 skaters was recorded in the 40 counts made over the sampling period. The great majority of these were weekend visitors (92.7 percent). In 33 weekday counts 379 skaters were recorded while 4,826 were tallied on 8 weekend counts, an average of 603.3 skaters per count. The highest recorded total was 1,780 skaters on the ice at 4:05 p.m. on Sunday, January 30. Intensive weekend use resulted in this area supporting a greater number of park users than any other observation unit. The results of the observations are presented in Tables 69 and 70.

In this sector the activity code 'park maintenance' refers mainly to the preparation of the ice surface by employees of the

TABLE 68

WINTER ACTIVITIES AND SEX OF PARTICIPANTS IN SECTOR 5

ACTIVITY	SEX OF PARTICIPANT				
	Male		Female		Total
	N	%	N	%	N
Walking	0.65	44.5	0.81	55.5	1.46
X C Skiing	0.78	59.5	0.53	40.5	1.31
Picnicking	0.11	42.3	0.15	57.7	0.26
BBQ Activity	0.05	50.0	0.05	50.0	0.10
Jogging	0.10	100.0	-	-	0.10
Dog Walking	-	-	0.05	100.0	0.05
Driving	-	-	-	-	11.93
TOTAL	1.69	51.5	1.59	48.5	3.28
					15.21*

Source: Winter observations

N of observations = 40

*Includes figures for activity 'driving'

Department of Parks and Recreation. This activity was characteristically noticed early in the mornings before many skaters were on the ice.

Sector 7

Winter sampling unit 7 is a large sub-area, comprising most of the southern and south-eastern sections of Mayfair Park. In the summer this area was dealt with by subdivision into three sectors - 7, 8 and 9. Like sector 4, this part of the park contains open and unprotected stretches with only the extreme south-eastern corner sheltered from cold winds. As a result, active kinds of recreational behaviour were dominant yet picnicking and barbeques were occasionally

TABLE 69

WINTER ACTIVITIES BY AGE GROUPS IN SECTOR 6

ACTIVITY	AGE GROUPS						
	Children		Teens		Adults		Total
	N	%	N	%	N	%	N
Skating	-	-	-	-	-	-	130.13
Walking	3.23	23.7	2.53	18.6	7.85	57.7	13.61
Relaxing	1.48	24.2	2.73	28.3	2.90	47.5	6.11
Park Maintenance	-	-	-	-	0.75	100.0	0.75
Photography	-	-	-	-	0.33	100.0	0.33
TOTAL	4.71	22.6	4.26	20.5	11.83	56.9	20.80
							150.93*

Source: Winter observations

N of observations = 40

*Includes figures for activity 'skating'

TABLE 70

WINTER ACTIVITIES AND SEX OF PARTICIPANTS IN SECTOR 6

ACTIVITY	SEX OF PARTICIPANTS				
	Male		Female		Total
	N	%	N	%	N
Skating	-	-	-	-	130.13
Walking	7.90	58.0	5.71	42.0	13.61
Relaxing	2.73	44.7	3.38	52.3	6.11
Park Maintenance	0.75	100.0	-	-	0.75
Photography	0.18	54.5	0.15	45.5	0.33
TOTAL	11.56	55.6	9.24	44.4	20.80
					150.93*

Source: Winter observations

N of observations

*Includes figures for activity 'skating' noted in the more sheltered enclaves.

This sector contains a small man-made hill to the south of the adventure playground from which children were seen riding toboggans. Apart from this activity, most participants in this sector were adult (64.3 percent) and male (60 percent). In a total of 40 counts in sector 7, 195 visitors were recorded for an average of 4.9 per count. Use of this part of the park was therefore not intensive. The results of the winter counts in sector 7 are illustrated in Tables 71 and 72.

TABLE 71

WINTER ACTIVITIES BY AGE GROUPS IN SECTOR 7

ACTIVITY	AGE GROUPS						
	Children		Teens		Adults		Total
	N	%	N	%	N	%	N
X C Skiing	0.30	16.4	0.13	7.1	1.40	76.5	1.83
Walking	0.20	21.1	0.10	10.5	0.65	68.4	0.95
BBQ Activity	0.33	39.8	0.10	12.0	0.40	48.2	0.83
Tobogganing	0.35	76.1	0.03	6.5	0.08	17.4	0.46
Picnicking	0.15	39.5	0.05	13.2	0.18	47.3	0.38
Park Maintenance	-	-	-	-	0.28	100.0	0.28
Jogging	-	-	-	-	0.15	100.0	0.15
Driving	-	-	-	-	-	-	7.76
TOTAL	1.33	27.3	0.41	8.4	3.14	64.3	4.88
							12.64*

Source: Winter observations

N of observations = 40

*Includes figures for activity 'driving'

TABLE 72

WINTER ACTIVITIES AND SEX OF PARTICIPANTS IN SECTOR 7

ACTIVITY	SEX OF PARTICIPANTS				
	Male		Female		Total
	N	%	N	%	N
X C Skiing	1.03	56.3	0.80	43.7	1.83
Walking	0.48	50.5	0.47	49.5	0.95
BBQ Activity	0.53	63.9	0.30	36.1	0.83
Tobogganing	0.28	60.9	0.18	39.1	0.46
Picnicking	0.18	47.4	0.20	52.6	0.38
Park Maintenance	0.28	100.0	-	-	0.28
Jogging	0.15	100.0	-	-	0.15
Driving	-	-	-	-	7.76
TOTAL	2.93	60.0	1.95	40.0	4.88
					12.64*

Source: Winter observations

N of observations = 40

*Includes figures for activity 'driving'

Sector 0

This observation unit was centred on the main river valley trail which borders the western and southern edge of Mayfair Park. The trail undulates and winds through heavily wooded tracts of land so only parts of this sampling unit were visible from any single vantage point. Walking was also difficult on steep sections of the trail, therefore, this sector was covered on skis.

Cross country skiing was the dominant activity on the trails, while walkers and joggers were observed on the more level stretches. A total of 318 recreationists was recorded in this sampling unit over the course of the observation period. Sixty-three percent of these were adult and nearly a quarter (23.2 percent) were children. Males (55.5 percent) were more frequently seen than females (44.5 percent). A summary of the observations in sector 0 is provided by Tables 73 and 74.

TABLE 73

WINTER ACTIVITIES BY AGE GROUPS IN SECTOR 0

ACTIVITY	AGE GROUPS						
	Children		Teens		Adults		Total
	N	%	N	%	N	%	N
X C Skiing	0.93	17.6	0.78	14.7	3.58	67.7	5.29
Walking	0.68	32.5	0.28	13.4	1.13	54.1	2.09
Tobogganing	0.23	82.1	-	-	0.05	17.9	0.28
Jogging	-	-	-	-	0.28	100.0	0.28
TOTAL	1.84	23.2	1.06	13.4	5.04	63.4	7.94

Source: Winter observations

N of observations = 40

TABLE 74

WINTER ACTIVITIES AND SEX OF PARTICIPANTS IN SECTOR 0

ACTIVITY	SEX OF PARTICIPANT				
	Male		Female		Total
	N	%	N	%	N
X C Skiing	2.95	55.8	2.34	44.2	5.29
Walking	0.98	47.0	1.11	53.0	2.09
Tobogganing	0.20	71.4	0.08	28.6	0.28
Jogging	0.28	100.0	-	-	0.28
TOTAL	4.41	55.5	3.53	44.5	7.94

Source: Winter observations

N of observations = 40

SUMMARY: SUMMER AND WINTER ACTIVITY PATTERNS IN MAYFAIR PARK

In this chapter the results of the observation studies conducted in Mayfair Park were presented. The observations were directed at determining the use patterns of recreationists who visited the park. Use was defined as the number of recreationists in the park at a given time, as well as qualitative differences in the activities of park visitors. A secondary aim of this chapter was to consider the suitability of observation as a research technique for the collection of such information. A review of relevant literature pointed out some of the theoretical and practical difficulties that are often encountered with the use of observation in social settings. Different types of observer systems were considered prior to the field studies and the technique of systematic observation was finally chosen. The observations were structured in the sense that time and area sampling procedures were standardized. Observation schedules were derived on the basis of preliminary observations of behaviour in the park, and their use in the field also helped standardize methods of data collection.

The results of the observations have shown that the technique was suitable for the determination of general activity patterns in a large urban park but that the efficacy of the technique is reduced when the area under observation is crowded. It was found that the park was too large to be treated as a single observation unit; it was impossible to view the whole park from a single vantage point. Division of the park into a number of conveniently sized sectors for the purposes of the walking censuses only partially solved this problem. On crowded days it was still difficult to discern the size and composition of visitor groups. The skating pavilion and the children's adventure playground were examples of facilities where crowding occasionally made accurate observations difficult. Similarly, it was also hard to distinguish the sex of young children. Some reactive problems were encountered early in the period of data collection. For this reason, the observer adopted the guise of a participant, dressing casually and occasionally engaging in recreational pursuits.

Tables 37 to 74 provide a comprehensive picture of the seasonal activity patterns observed in Mayfair Park. From these tables it is obvious that a greater number of users visit the park in summer, and that summer use is distributed more evenly throughout the park. On the other hand, winter use is concentrated in a smaller area - the skating facility. The type of activities observed also differed between seasons. Summer users favoured passive activities while winter use patterns were dominated by active pursuits. In all the observation units a greater range of activities occurred in summer than in winter. The timing of park visits was also observed to be affected by the differing seasons. Evening use was heavier in the summer than in winter, as was early morning and morning use. In contrast, afternoon use was more significant in the winter, particularly on weekends. Winter visits appeared to be significantly affected by two factors; the day of the week and the weather. Weekend visits comprised the great majority of winter use. The same pattern was evident in the summer months, though summer use was not dominated to the same extent by the weekend period.

Weather conditions were of overriding importance in the winter. Episodes of crowding, such as that noticed on Sunday, January 30, invariably occurred on mild, sunny Sundays, when temperatures were above -10°C. The more exposed parts of the park were almost deserted in the winter, even on these relatively mild days.

This marked pattern of weekend peaking resulted in some facilities supporting larger numbers of visitors than they were designed for. For example, the main parking lot (area 2 in both summer and winter) was little used for most of the week while it was often used at more than full capacity (240 vehicles) during summer and winter weekends. One result of this was conflict between activities in some sectors of the park. Sector 1, while environmentally suitable for retreat-type activities such as sunbathing and reading, did not support these types of activities, perhaps because of the problems caused by spillover parking from the main parking lot. Other facilities, for example the pavilion and the adventure playground, were frequently observed operating beyond their planned capacities.

In summer, the wooded, more "private" parts of the park encouraged activities such as picnicking, reading and sunbathing while the more open, grassy areas encouraged active play with games like football and frisbee often observed. Winter visitors, on the other hand, engaged in active pursuits in all parts of the park, with the sole exception of the skating pavilion, where passive activities were dominant.

CHAPTER VI

CONCLUSIONS

REVIEW OF OBJECTIVES

In the introduction to this thesis it was argued that planners of urban recreational settings and facilities need to incorporate a variety of behavioural information into their planning and research briefs. From the literature review that followed it was suggested that some of this information should consist of evaluations of the day-to-day performance of plans that have been put into effect. In particular, such evaluations should take into account the opinions of the people who have to live with the plans. This thesis was therefore offered as a case study in the post-plan evaluation of a large urban recreational facility - Mayfair Park, Edmonton.

The primary aims of the thesis were twofold: first, to identify the planning conceptions that led to the creation of Mayfair Park, and second, to evaluate these conceptions in the light of the experience gained from their implementation. This required the formulation of measures of evaluation by which to judge the completed design. The most important of these were the reactions, opinions, attitudes and behaviour of people observed or interviewed within the park. With this information it was possible to compare actual recreation patterns generated by the facility, with those that were planned for.

To what extent do these results indicate a divergence between planned and actual uses in the park? It is suggested that the study revealed the existence of perceptual gaps between planners and their clientele. These results point to the need for further, similar case studies of planned and completed projects, to bring to light the successes and failures of these projects, and thereby to help to strengthen contemporary planning practice.

The evaluative measures utilized in this thesis were generally suitable for its objectives, but in future research of this nature it is suggested that the opinions and perceptions of non-users should also be determined. A control sample could be drawn from the community at large and non-users questioned to discover the extent of, and the reasons for, dissatisfaction with existing community recreational facilities and opportunities. In this way a more comprehensive understanding of community recreational preferences could be developed.

PLANNED AND ACTUAL USES: PLANNING CONCEPTIONS

The planning and developmental history of Mayfair Park is one of gradual evolution over the period from 1953 to 1973-74. While the construction phase of the development of the park has been subject to the effects of reconsiderations (for example, the swimming pool has not yet been built), the concepts that guided the creation of the park have been strictly adhered to. To recapitulate, these concepts are as follows:

1. Family use
2. All Season use
3. City-level park
4. Freely accessible to all
5. Total recreational concept

The major findings of this study regarding each of these planning notions are set down below.

Family Use

This meant that users of all ages would be attracted to the facility and that small parties of visitors would be encouraged. Activities related to this concept were characteristically 'free' or unorganized, such as skating, fishing and picnicking. The lake, the playground, the picnic areas and the playing fields are examples of settings intended to encourage family uses. Similarly, the one-way circular roadway was included in the design as it was felt that automobile access to the picnic areas would facilitate family use. In addition, certain facilities were to function as meeting places for small groups. The pavilion and the picnic shelters function in this way.

From the questionnaires it was evident that both summer and winter users were evenly distributed as to sex but were concentrated in the age range of 20 to 30. Nearly half the summer (48 percent) and winter (49 percent) visitors were from this age group. The middle age range of 31 to 50 was also well represented but teenagers and those over 50 were, in general, underrepresented. Teenagers comprised only 8 percent of the winter sample while those over 50 accounted for only one percent of these visitors. The observation studies tended to confirm the pattern of low patronage by teenagers; however, as park visitors were categorized into only three age ranges (adults, teens and children), observations were somewhat less useful for examining the extent of patronage by those over 50.

The observation studies revealed that different parts of the park appeared to attract users from different age ranges. In the summer, teenagers favoured sectors 6, 7, 8 and 9 while they were less frequently counted in sectors 2 and 10 particularly. These last two sectors are the parking lot and the adventure playground and so low levels of teenage use in both these areas is not unusual. Why teenage use should be higher in the other four sectors is not immediately obvious, since they exhibit a wide variety of landscape types and have been designed for widely differing uses. Areas 6 and 8 are intended for family picnics while areas 7 and 9 are flat, open, grassy playing fields with few picnic facilities. It appears that these areas attracted teenagers not because of the environmental characteristics of the settings, but because of various social factors. They function as meeting places for young people although the reasons for this are not clear. It may be that young people identify with a part of the park and return there primarily because they know from past visits that this is where their friends and acquaintances can be found. It seems that there are different "social spaces" within the park, linked only loosely to elements of the park's design. From this it is suggested that there is no simple relationship between the environmental attributes of the park's sectors and the resulting patterns of use that are observed.

Closer examination of the observation data lends support to this suggestion. Area 8 was designed for family picnics and for solitary activities like strolling, sitting, reading and thinking. Much of it was left in a natural state with picnic sites and barbeque stoves scattered amongst the trees. To encourage family uses, a large parking lot and a picnic shelter with washrooms were located here. The observation data show, however, that two conflicting types of use occur in this sector. As well as family uses, there is a degree of use by groups of young people who visit the park to drink beer and listen to their car stereos. There is obvious conflict between the small family-type groups and these large, loud groups of party-goers.

Ironically, it appears that some of the design elements intended to encourage family use have unintentionally facilitated this conflict. In particular, the south parking lot which enables families to bring their picnicking equipment close to their chosen picnic site, allows the competing user groups to set up their car stereos nearby. Similarly, the one-way road system which exists to encourage family use has inadvertently resulted in this part of the park being used for large drinking parties. Police patrols have to travel a complete circuit of the park to reach this area which gives the drinkers time to conceal their beer cases. This finding suggests that, if this area is to function as a secluded, private part of the park, as was intended, care must be taken to ensure that these conflict situations are reduced. Increased patrolling of the park would perhaps lead to a reduction of tension in this zone.

Sector 1 was another part of the park in which observed uses conflict with the concept of family use, at least in summer. This area was designed primarily as a buffer zone to reduce traffic noise from the adjacent Groat Road expressway. It also contains a number of picnic sites and was intended to function, in part, as a family picnic area, and also as an area for retreat or escape. Surprisingly, its actual use patterns were characterized by active pursuits;

it did not function as a retreat area. During the period of observations, it was noted that this sector serves as a spillover parking area for sector 2, the main lot, and for sector 10, the adventure playground. It is felt that the problems associated with the large number of cars in this area discourage visitors from engaging in retreat-type activities.

Group size was also related to the concept of family use. A majority of visitors interviewed in the park came in small groups of between two and four people (summer 57 percent; winter 68 percent). Winter groups tended to be somewhat larger than summer groups, though two respondents in the winter sample were with large skating parties of 20 and 30 people respectively, and this increased the mean group size to 4.09 in the winter compared with 2.9 for the summer. Most respondents reported that they were accompanied by family members though approximately 30 percent of the total sample went to the park with friends. In this aspect of family use, the original intuited estimates of the park's planners were accurate. The majority of recreationists interviewed in Mayfair Park belonged to small social groups based on ties of either friendship or kinship.

All Season Use

This meant that the park would attract winter and summer uses. The key design element supporting this idea is the lake which is used for skating in the winter, and boating and fishing in the summer. The trail system also was developed to encourage seasonal uses.

It was found that the park was well patronized in both summer and winter, though a period of low use was noted in autumn. As formal observations were not carried out in that season however, it was not possible to develop this point further. Popular summer activities were, in order, walking, picnicking, driving for pleasure, eating lunch, sunning, relaxing, throwing a frisbee and reading. These were mostly passive in character. In contrast, winter activities were more active, with skating, relaxing, walking, driving for pleasure and skiing being amongst the most popular. A greater range of activities was noted in the summer, both in the observation studies and in the responses of those surveyed. Winter activities appeared to be more 'social' than summer activities as fewer visitors interviewed were alone in the park.

Summer use was generally more intensive than winter use with the exception of the skating facility (the ice) and the pavilion which recorded substantial use, particularly on weekends. In the summer visitors distributed themselves to all parts of the park whereas winter use was centred in a small area, the ice. Moreover, summer use is distributed more evenly throughout the week while winter use patterns show a marked peaking effect on weekends. The most affected parts of the park are the ice, the pavilion and the main parking lot. These episodes of winter weekend crowding are invariably associated with favourable weather conditions. It was noted that the weather is a more critical factor determining use levels in the winter than in the summer.

These findings present some interesting problems to the Parks Department planners. First, there is the need to distribute winter use more evenly throughout the entire area of the park. The observation data show that some areas, particularly sectors 1, 4, 5 and 7 are rarely used in winter, except to provide parking facilities for those who come to skate. On reflection, there appears to be little that can be done to improve this situation. These areas lie exposed to the wind in winter and cross-country skiers prefer to use the more sheltered and scenic riverside trails.

The second problem is that of episodes of weekend crowding in the park. These episodes appear to be more severe in winter than in summer, though a closer inspection of the data reveals that this is a superficial view. Crowding in the winter is certainly more obvious because it is concentrated in a smaller part of the park, but there is evidence in their questionnaire responses that winter users were less likely to be disturbed by these events. It was true that winter visitors were more "aware" of crowds in the park; over 88 percent thought the park "somewhat crowded" or worse compared with 66 percent of summer visitors. They also thought the park "smaller" than summer visitors and somewhat noisier. However, this is counter-balanced by the finding that summer and winter users visit for different reasons, and consequently have different expectations. Winter visitors engage in more "social" activities. They were more likely to have come to the park in a social group, they were less bothered by the presence of cars, and, although they were more likely to describe the park as noisy, they were less likely to list this amongst their dislikes. Summer visitors, on the other hand, frequently visited the park to escape or retreat from the pressures of urban living. They rated the appearance of the park, its size, and its relaxing atmosphere, more importantly than the winter users, who were more concerned with the adequacy or otherwise of the facilities.

Summer and winter visitors, then, see the park in different ways; they visit for different purposes, and they have different concerns. While winter users are more aware of the problems associated with crowding, they are less troubled by them. This is indicated by the responses to the question - "Would you be prepared to accept restrictions on the number of people allowed into the park at any one time?" Thirty percent of summer visitors said "yes" compared with less than 18 percent of winter respondents.

To return to the implications for planners in these findings, it appears that the main thrust of any corrective measures should be directed at the more sensitive summer users. The major question is: "What form should these measures take?" While thirty percent of summer visitors would accept restrictions being placed on the availability of the park, there still remains the great majority who would not. In addition, to restrict use in this way would contravene some of the initial conceptions underlying the creation of the park.

A second possibility would be to alter the design of the park in several ways. One such step might be to reduce the parking opportunities. Other measures that could be taken include the complete closing of the road, or perhaps changing it from a through-road to a two-way thoroughfare closed off at the southeastern corner of the park. There are still further possibilities. Cars could be allowed into the park only to allow visitors to drop off their picnicking equipment; under this scheme parking could be provided in one large central lot at the park's entrance. Or, another possible measure would be to close the access road in summer and reopen it in winter. Since summer users are more sensitive to environmental and social problems, they may well be prepared to walk to parts of the park for the expectation of a more relaxing experience. Winter users expect a different kind of experience in Mayfair Park, and cars and crowds appear to bother them less than summer visitors.

These corrective measures if they are to be effective, must be taken with great care. The observation studies have shown that alterations to the park's design may not result in the desired behavioural consequences. To illustrate, the existing design restraints on parking have not necessarily reduced patronage, but have created undesirable associated problems such as illegal parking on both sides of the roadway and spillover parking into areas unsuited for this purpose. Therefore, it is recommended that an incremental approach to the solution of these problems be taken by the planners responsible for the park's design. Modifications to the design should take place in stages and the consequences should be closely monitored. In this way a better knowledge would be gained of the behavioural results of differing design emphases. If this process of constant review was continued it should be possible to create a recreational environment responsive to the needs of the population to be served.

City-Level Park: Freely Accessible to All

These two concepts are closely related and will be dealt with together. The first means that the park was planned as part of an integrated, hierarchical system of parklands in Edmonton. City-level parks, such as Mayfair, were to be of city-wide attraction and significance, each with a unique character of its own. The second concept, that of a 'free park', means that the park was intended to be physically and economically accessible to all residents of Edmonton.

The two concepts are related in that to attract and accommodate visitors from all parts of the city, the park was necessarily large in size and unique in character.

The notion of a hierarchical arrangement of urban parks in Edmonton was suggested by the authors of the 1955 Report. In this report, space standards were laid down that have ultimately guided the provision of outdoor recreational facilities in the city. To examine the effects of this approach, a section of the questionnaire tested people's opinions of the recreational opportunities available in the city of Edmonton. When asked if Edmonton was well provided with parks, 46 percent of summer, and 72.5 percent of winter respondents said "no". Twelve percent of respondents in both samples pointed out that existing parks were too crowded, 10 percent said that parkland was not distributed equally in all communities; the downtown area and the newer subdivisions were cited as deficient areas. These findings suggest that the standards approach to the provision of urban parkland in Edmonton has not been flexible enough to cope with changing circumstances, such as changes in the size and distribution of the population of the metropolitan area.

This suggestion is supported by the data presented in Chapter IV on the physical accessibility of Mayfair Park to the city population. Figure 11 illustrates that visitors to the park travelled from nearly all parts of the city but that visitors from the northeastern and southeastern sections of Edmonton were underrepresented in the sample. A concentration of park users came from the inner city, particularly from the medium to high density apartment areas surrounding Jasper Avenue. It was noted that the CBD and the heavily congested roadways surrounding Whyte Avenue acted as a barrier to travel to Mayfair Park. It is obvious, then, that the park does not attract visitors equally from all parts of the city.

It was also found that the attraction or "pull" of the park varied between seasons. Local use was more pronounced in summer while winter users were prepared to travel for slightly longer to visit the park. Most of the winter sample fell into the middle range category of travelling time (from 11 to 25 minutes) while significantly less of the summer sample fell into this category. Relatively few visitors were prepared to travel more than 25 minutes to reach the park (Table 10). These results show that the attraction of the park was greatest in the winter. From this it can be deduced that, as winter use is based on the activity skating, there is a strong demand for the development of further outdoor skating facilities in a natural setting in Edmonton.

The great majority of visitors to Mayfair Park travelled by car. Less than three percent of the total sample came to the park by public transport. Most of those interviewed did not know whether the public transit service to the park was adequate or otherwise. Fourteen percent thought it was inadequate. These findings indicate that the park is not universally accessible to all residents of Edmonton. Those who do not own cars obviously find the park difficult to reach, which may account for the underrepresentation of the elderly in the park user survey. The public transit service to the park needs to be improved if all Edmontonians are to have reasonable access to it.

Total Recreational Concept

From the planning interviews it was determined that this concept meant that the park was to contain a wide array of facilities which would encourage a similar variety of uses. By building variety into the design, the park's planners envisaged that there would be "something for everyone" in the park.

The observation data and the information from the questionnaires showed that the park does generate a wide variety of uses. There is, however, a certain degree of reluctance amongst visitors to see development of the park proceed further. Many of the interviewees disagreed with any proposed expansion of the park's facilities; they felt this would only attract more users and increase the problems associated with crowding. Most visitors were generally satisfied with the degree of development of the park, and with the facilities provided there. Summer users pointed to the need for a swimming pool and winter visitors indicated that another skating pavilion would be desirable but, apart from these suggestions, few additional facilities were wanted.

The implications for the park's planners in these results are that visitors are generally satisfied with the present level of facility provision within the park and that the plans calling for a continuation of the development programme should be modified to take account of this attitude. Further development would antogonize those visitors who come to the park because of its relaxing atmosphere; this would include almost a quarter of summer visitors. It appears, then, that the notion of a fully developed park is attractive to some users and not to others. To determine the extent of community dissatisfaction with the degree of development of Mayfair Park, non-users of the park would have to be interviewed. As off-site interviews were not conducted during the present study, it is not possible to develop this point further. Yet it is sufficient to note that Mayfair Park serves as an important "retreat" or place of "escape" for a number of Edmonton's residents and that to develop the park further would interfere with this aspect of its function.

In the previous sub-section of this concluding chapter, it was suggested that the public transit service to Mayfair should be improved to allow all Edmontonians reasonable access to the park. This move would presumably have the effect of increasing the use of the park, and would also alienate those who visit in search of peace and quiet. It may be, however, that this apparent dilemma is more illusory than real. Improving the public transit service to the park may result in a small increase in its use, but these additional visitors will have come by bus and will not increase the strain on parking facilities, nor add to the problems caused by the presence of cars within the park.

THE MEASUREMENT OF NEED

The need for a park of this type was determined on the basis of the experience of the planning personnel involved. Practical experience was also the main criterion of evaluation during the design of the park and its facilities. This approach demonstrates a reliance on the intuitions and personal judgments of the Parks Department staff. No behavioural data were collected - the need for such a park was presumed to be self-evident. At the same time, it was also believed that, because the park was to be a city-level facility, it would have been too difficult to sample a representative proportion of the city's population to gather information on recreational needs. The scale of the project, and the size of the clientele it was intended to serve, precluded the input of data from recreational surveys.

It was found that the little amount of analytical work that was conducted was directed at rationalizing the decision to create the park after this decision had been made. The demand for urban parkspace in the City was calculated by using methods characteristic of the traditional approach to urban recreation planning, that is, a reliance on standards, on projected increases in population and on participation rates in various activities. Most of this work was of limited value.

Estimates of the number of visitors who would use the park were similarly intuited. It was anticipated that the park would attract from 1,000 to 2,000 visitors on a busy day and so it was designed to accommodate this number of people at any one time. Special events were expected to draw up to 3,000 users, though it was not thought desirable to have this limit exceeded for environmental and psychological reasons. In some ways the park was designed to restrict the maximum number of users. For example, parking facilities were provided for a total of 592 cars. Assuming an average of three persons/vehicles, the total assigned patronage of the park was 1,776.

This intuitive approach to the measurement of need was found to be defective in some ways. This study has shown that the anticipated use levels have been greatly exceeded. For example, a Sunday attendance survey in summer, 1971, (referred to in Chapter IV) indicated 5,400 people visited the park during the day and that over 1,900 cars were parked there during that time. During the period of summer observations a total of 21,463 visitors was counted in the park, while 10,715 were recorded in winter. Incidences of crowding were recorded on several occasions during the observation studies. It is obvious that the park's planners greatly underestimated the demand for a park of this type.

SOME METHODOLOGICAL SUGGESTIONS

A Comment on the Use of Complementary Techniques

The three major research techniques utilized in the data collection phase of this study were observation, questionnaires, and interviews with planning personnel. In general, these techniques served their purposes well, though some problems were encountered. The three types of techniques, when used in conjunction as they were in this study, produced more data than was necessary for the purposes of the study objectives. This was unfortunate as limitations of time meant that the data, particularly from the questionnaires, could not be analysed in great detail.

This disadvantage is offset, in part, by the advantages gained from using complementary research techniques. Observation studies enabled general use patterns to be determined unobtrusively. The observations uncovered information on levels of use, the types of activities engaged in by park visitors, the age and sex of participants in those activities and the general distribution of visitors throughout the park. In other words, this information revealed how the park was actually used. The questionnaires added to this descriptive information by revealing some of the attitudes and opinions of visitors to the park. In addition, it was possible to obtain information on respondents' home addresses from the questionnaires. By combining the information gained from these two techniques it was possible to build up a comprehensive picture of recreationists' use of, and attitudes towards Mayfair Park.

The Observation Studies

A variant of participant observation was chosen to record the activity patterns and characteristics of park visitors. The major advantage of the participant approach was its relative unobtrusiveness; data could be collected quietly with little disturbance to the people under observation. Few reactive problems were encountered during the study.

In the exploratory stages of the observations, field notes were written down in longhand. It was soon found that recreation patterns within the park were too complex to be recorded in this way. Consequently, a field schedule was designed to facilitate data collection and to standardize the observations as much as possible. The field schedule that was used helped in some ways (for example, it made the recording of activities easier when the park was crowded), but there were still problems with its use. It was often difficult to determine the sex of children; there was no category on the schedule to allow for indecision on the part of the observer. Also, it was difficult to ascertain where social groups began and ended on busy days. Rather than guess at the size of these groups, this information was not recorded on the field sheet. As a result of these weaknesses, it was felt that the schedule used here was suitable for recording information on the majority of occasions, but was unsuited to the task when the park was very crowded.

Another limitation of the observation studies was that the study area was too large for the accurate recording of events. This problem was partly dealt with by dividing the park into conveniently sized sub-areas. Despite this procedure, the park was occasionally too busy to accurately observe all the events occurring within a sector. There was too much happening too quickly for the observations to be of much utility. From this it is suggested that the technique of participant observation is suitable for the recording of behavioural events that take place in settings of limited size. For example, an accurate picture of activity patterns in the adventure playground, or perhaps in the skating pavilion, could be obtained by the use of this technique. It is, however, unsuited for use in large areas.

The Planning Interviews

The planning interviews were conducted to uncover, first, the concepts and philosophies that gave rise to the creation of the park and, second, the patterns of use that were anticipated within the completed park. With regard to the first of these two purposes, the interviews were very successful. They were less useful in determining anticipated use patterns. The chief reason for this was that the technique of showing the interviewees the small sketch maps of the park (on which they were asked to indicate uses) did not work well in practice. The sketches were too small (approximate scale 1 cm = 0.1 km) so that only broad, generalized patterns of use could be identified. Working with larger sketch maps would have improved the results of these interviews.

The Questionnaire

During the administering of the questionnaires, some problems were encountered. Interviewees occasionally misinterpreted the meaning of the open ended questions and gave responses of limited value to the study objectives. In general, the closed ended questions created fewer problems, both in the field and in the course of analysis. It was thought that the pilot questionnaire would uncover problems of this nature, but it did not. Therefore, it is recommended that the sample size in a pilot questionnaire be significantly larger than the thirty-four respondents interviewed for this study. This is particularly important where many of the questions are open ended and are subject to misinterpretation.

Another problem was created by the small size of the sample used in this study. Although the total sample size was 252 respondents, only 102 interviews were conducted during the winter. This small winter sample proved a major constraint to the utilization of some useful statistical tests, notably chi-square analysis. In future research of this nature it would be preferable to increase the sample size to at least 150 respondents for each survey, if only to ensure the applicability of the chi-square test.

IMPLICATIONS OF THE STUDY

The results of this study have shown that, in general terms, Mayfair Park is undoubtedly a success with its users. It is well patronized in both summer and winter and those visitors interviewed indicated they valued the park quite highly. The planners' role in the success of the park appears to be due to their fairly accurate perception of community recreational needs. That there is a demand for a park such as Mayfair has been proven by its popularity with Edmontonians. In addition, planners' perceptions of the use patterns in the park generally reflect those that take place there.

The study has, however, pointed to several problem areas in the park's design from which planners of future, similar areas can learn. These problems are concerned with the relationship between physical design and the behavioural patterns of the users of that design. In the planning of Mayfair Park, the guiding concept was that the park would be created for the use of families and other small groups, and the park was designed to encourage this type of use. Yet, various elements of the park's design have unintentionally encouraged competitive users, particularly large groups of noisy party goers. It has also been shown that the park's planners erred in their estimates of the number of people who would visit the completed park. The design restraints (particularly the limited parking facilities) intended to restrict the number of visitors, have been only marginally successful. They have, instead, encouraged some undesirable uses, such as illegal roadside parking and the intrusion of spillover parking into areas unsuited for this function. Episodes of weekend crowding continue, despite the inability of the park's facilities to accommodate excessive numbers of people. The parking lots are particularly susceptible to these episodes of crowding, especially in winter when use is concentrated in a relatively small part of the park. An increase in parking space would perhaps alleviate somewhat the problem of crowded parking facilities, yet such a step might also exacerbate the situation by increasing patronage.

These observed discrepancies between planned and actual uses demand some attempt at explanation. It is not surprising that the park's planners underestimated the demand for a facility such as Mayfair. The accurate forecasting of demand remains a very real problem to planners of urban recreation facilities. The results of this thesis indicate that a contributing factor was that the link between the goals and objectives formulated by the planners and the resulting design phase of the planning operation was weakly forged, if at all. It was determined that these planning goals were based on the assumptions, intuitions, and past experiences of the personnel responsible for the planning of the park. This approach was termed the traditional approach and was characteristic of recreation planning during the years when the park was created. Under this approach, little attempt was made to collect information on the preferences of the people planned for. Similarly, estimates of the demand for a park such as Mayfair were primarily intuited and rather poorly justified after the fact by analytical work of questionable quality. In the design stage of the planning of the park, these intuitively derived goals became the criteria of evaluation between alternative schemes. Thus, the weaknesses evident in the planning approach to the formulation of goals, were carried into the design phases of the planning of the park.

In the light of these findings, some suggestions can be made that may improve the process of planning for outdoor recreation in urban areas. First, the goals and objectives of planning programmes should be determined in consultation with the public being planned for. It is obvious that planners' perceptions of public goals do not always reflect accurately the values, wants and needs of a given community. To reduce the chances of these perceptual gaps resulting in less than successful recreational facilities, a wide variety of information from the public should be collected and analysed by the members of a planning team prior to any attempt to formulate goals and objectives. Formal public participation in the planning process is one method by which this information could be collected. Another is by the method used in this thesis - that of post-plan evaluation.

Second, to be able to learn from past planning experience presumes an efficient method of feeding back information from post-plan evaluations into the planning process. A concentration on the post-plan survey and analysis stages of a planning task demands that planning take place within a cyclical, cybernetic system. Only in such a cyclical system can the information gained from the experience of living with plans that have been implemented, be fed back into the planning process to provide planners with a measure of the success of their various notions, beliefs and theories. Such a planning system demands that evaluation and review be a continuous process rather than an exercise carried out at infrequent and lengthy intervals. In this way, the mistakes of the past can be avoided, and the ability of planners to create urban recreational settings responsive to community recreational needs, will be enhanced.

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APPENDIX A

(Revised)

Campground ______________________
Date ______________________
Time ______________________
Sector ______________________

Role Segregation-Allocation Schedule

	Group Sex Composition				Age				
Activity	All Male	All Female	Mixed		Child 1-13	Teen 13-20	Adult 20 & over	Mixed	
			M	F				C(1-20)	A
Games (specify)									
1.									
2.									
3.									
4.									
Fishing									
Water skiing									
Other (specify)									
1. Walking									
2. Boating									
3. Reading									
4. Sunbathing									
5. Rock throwing									
6. Wood chopping									
7. Meditation									
8.									
Camp Maintenance (specify)									
1.									
2.									
3.									
Food Preparation									
Sociability									
Inter-unit									
Intra-unit									

Notes:

Source: Burch (1964)

APPENDIX B

SUMMER QUESTIONNAIRE

User Perception of Mayfair Park.

Respondent No. _____ Date _______________ Time ________ Sector ____

Hello, I'm a student at the University of Alberta and I'd like to ask you a few questions about Mayfair Park.

1. How did you travel to the park today?

   Car_____ public transit___ other (explain)
   walked _____ bicycle ____ _______________

2. How long did it take you to travel from your home to the park?

   _______________ minutes.

3. Do you find the park easy to get into from the main road?

   yes _____
   dont know_____
   no _____

4. What is your opinion of the public transit service to Mayfair Park?

   adequate ___
   dont know ____
   inadequate ____

5. Did you come alone or with others?

   alone ____
   friends ____ other group (No. in group) ______
   family ____

6. How often do you visit Mayfair Park? (Complete the appropriate category)

   ________ daily
   ________ times a week
   ________ times each month
   ________ times each year

7. Do you usually come during the week or at the weekends?

weekdays ___ weekends ___ both ___

8. At what time of the day do you usually come to the park?

early morning ___ lunch time ___ evening ___

morning ___ afternoon ___

9. How long will you stay in the park today?

_______ hours.

10. What do you particularly like about the park?

____

____

____

11. What, if anything, do you dislike about the park?

____

____

____

12. What particular factors influenced your decision to come here today?

13. I am going to read you a list of the available facilities in Mayfair Park. For each of these facilities could you please indicate those you consider adequate and those you consider inadequate? (con't. on next page)

Facility	Adequate	Inadequate	Dont know
parking			
washrooms			
concession			
picnic shelters			
trails			
barbeques			
picnic tables			
adventure playground			
the lake			
the lockers			
paddle boats			
playing fields			

14. Generally, would you consider that the facilities provided at Mayfair are adequate?

yes ___
dont know ___
no ___

15. What if any, additional facilities would you like to see provided here?

16. Do you like the architecture of the buildings?

yes ___ no __ no opinion __

17. Does the architecture blend with the environment of the park?

yes __ no __ no opinion __

18. Does the presence of motor vehicles in the park affect you in any way?

yes __ no ___

If yes, in what way?

19. What is your opinion of the one-way traffic circulation system that operates within the park?

20. Is this one-way access road dangerous for children?

yes ___ no ___

21. I am now going to read you a list of activities possible in this park; for each of these activities please indicate how often you engage in the activity listed. (For example, do you bicycle often, sometimes, never.)

	often	sometimes	never
picnicking			
drive for pleasure			
sunbathe			
take a child to a playground			
walk for pleasure			
walk a dog			
fishing			
eat lunch			
boating on the lake			
attend outdoor concert/play			
arts and crafts			
throw a frisbee			
bicycling			
jogging			
football			
baseball			
horseriding			
soccer			

21. con't.

	often	sometimes	never
volleyball			
badminton			
play the stereo			
watching sports events			
read a book			

22. Are there any other activities not yet mentioned that you do in this park? activity ____________________

___ often

___ sometimes

___ other

23. Please indicate which words best describe Mayfair Park.

large	medium	small
too big	just right	too small
well landscaped	somewhat landscaped	not landscaped
too many trees	enough trees	not enough trees
too much grass	enough grass	not enough grass
too much pavement	enough pavement	not enough pavement
obviously planned	somewhat planned	not planned
noisy	somewhat noisy	quiet
safe	safe enough	not safe
crowded	somewhat crowded	not crowded
well patrolled	somewhat patrolled	not patrolled
littered	somewhat	not
lots of parking	enough	not enough

24. How would you describe the park as a place to bring children?

good ___ fair ___ bad ___

25. Do you think the park suffers if at all, from overuse?

yes ___ no ___ dont know ___

If yes, in what way?

26. Would you be prepared to accept any restrictions on the number of people allowed into the park at any one time?

yes ___ no ___ dont know ___

27. Do you think Edmonton has enough parks?

yes ___ no ___

If no, why?

28. How often do you visit other parks?

never ___ seldom ___ often ___

Which parks? ______________________________

29. Which of all the parks in Edmonton do you most frequent? (including Mayfair)

____

30. Does Mayfair compare favourably with the other river valley parks in Edmonton?

yes ___ no ___ dont know ___

31. That about covers everything with the exception of these questions.

A. Age _____________

occupation _______________________________

working hours day ________

night _______

B. spouse (if applicable)

occupation ____________________________________

working hours, day ________

night ______

C. dependents living at home

how many __________

ages ____________________________

D. What is your street address? (Not house number

Is your home a

____ single family dwelling

____ duplex

____ walk up apartment

____ highrise apartment

____ row

other ________________________

WINTER QUESTIONNAIRE

The following modifications to the summer questionnaire were utilized in the winter surveys.

12. I am going to read you a list of available facilities in Mayfair Park. For each of these facilities could you please indicate those you consider adequate and those you consider inadequate?

Facility	Adequate	Inadequate	Dont know
Parking			
Washrooms			
Concession			
Picnic shelters			
Picnic tables			

con't.

Facility	Adequate	Inadequate	Dont know
Trails			
Barbeques			
The lake (the ice)			
The lockers			

19. I am now going to read you a list of winter activities possible in this park: for each of these activities please indicate how often you engage in the activity listed. For example, do you skate often, sometimes, or never?

Activity	often	sometimes	never
walk			
walk a dog			
drive for pleasure			
jogging			
snowshoeing			
skating			
X C skiing			
tobogganing			
photography			
sitting and relaxing			